

Report No. CETHA-BC-CR-89354

USATHAMA

U.S. Army Toxic and Hazardous Materials Agency

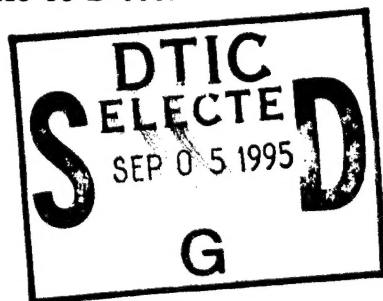


Task Order 2 Enhanced Preliminary Assessment

NEW ORLEANS
MILITARY OCEAN TERMINAL
NEW ORLEANS, LOUISIANA

Contract Number DAAA15-88-D-0007

December 1989



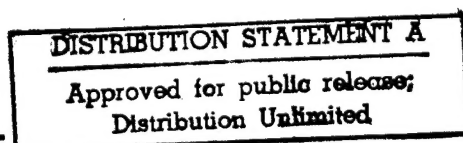
Prepared for

U.S. Army Toxic and Hazardous Materials Agency
Aberdeen Proving Ground, Maryland 21010-5401

Prepared by



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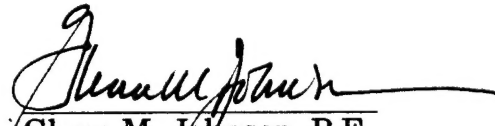
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Report No. CETHA-BC-CR-89354

USATHAMA Task Order 2
ENHANCED PRELIMINARY ASSESSMENT
NEW ORLEANS MILITARY OCEAN TERMINAL
NEW ORLEANS, LOUISIANA
Contract No. DAAA15-88-D-0007


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December 1989

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REPORT DOCUMENTATION PAGE

1a. REPORT SECURITY CLASSIFICATION Unclassified			1b. RESTRICTIVE MARKINGS		
2a. SECURITY CLASSIFICATION AUTHORITY			3. DISTRIBUTION / AVAILABILITY OF REPORT		
2b. DECLASSIFICATION / DOWNGRADING SCHEDULE			Distribution unlimited.		
4. PERFORMING ORGANIZATION REPORT NUMBER(S) 2281-09-02-0800			5. MONITORING ORGANIZATION REPORT NUMBER(S)		
6a. NAME OF PERFORMING ORGANIZATION Roy F. Weston, Inc.		6b. OFFICE SYMBOL (If applicable)	7a. NAME OF MONITORING ORGANIZATION U.S. Army Toxic and Hazardous Materials Agency		
6c. ADDRESS (City, State, and ZIP Code) 1 Weston Way West Chester, Pa 19380			7b. ADDRESS (City, State, and ZIP Code) ATTN: CETHA-BC-B Aberdeen Proving Ground (Edgewood Area) Maryland 21010-5401		
8a. NAME OF FUNDING / SPONSORING ORGANIZATION USATHAMA		8b. OFFICE SYMBOL (If applicable)	9. PROCUREMENT INSTRUMENT IDENTIFICATION NUMBER DAAA-88-D-0007 Task Order 2		
8c. ADDRESS (City, State, and ZIP Code) ATTN: CETHA-BC-B Aberdeen Proving Ground (Edgewood Area) Maryland 21010-5401			10. SOURCE OF FUNDING NUMBERS		
			PROGRAM ELEMENT NO.	PROJECT NO.	TASK NO.
					WORK UNIT ACCESSION NO.
11. TITLE (Include Security Classification) Preliminary Assessment Report: New Orleans Military Ocean Terminal					
12. PERSONAL AUTHOR(S)					
13a. TYPE OF REPORT Final		13b. TIME COVERED FROM 10/89 to 12/89		14. DATE OF REPORT (Year, Month, Day) 1989, December	
15. PAGE COUNT					
16. SUPPLEMENTARY NOTATION					
17. COSATI CODES			18. SUBJECT TERMS (Continue on reverse if necessary and identify by block number)		
FIELD	GROUP	SUB-GROUP	See attached sheet.		
19. ABSTRACT (Continue on reverse if necessary and identify by block number) A preliminary assessment was conducted at the New Orleans Military Ocean Terminal (New Orleans MOT), which is planned for inclusion in the Base Closure Program. New Orleans MOT is located at the intersection of the Mississippi River and the Inner Harbor Navigation Canal within the corporate limits of New Orleans, Louisiana. The facility can be divided into two major activities: warehousing and ship- ping and privately owned vehicle shipment preparation. New Orleans MOT has had the assignment of shipping Department of Defense materials through New Orleans since 1919 although this activity was interrupted to an uncertain ex- tent from 1922 to 1942. No environmentally significant operations (ESOs) were observed during the site visit on 24 October 1989 or during follow-up inter- views that would require immediate action. A geophysical survey is recommend- ed to confirm the presence of three possible tanks on the property. All transformers should be tested for polychlorinated biphenyls. Asbestos sampling is recommended for all buildings. Soil samples should be obtained along exist- ing and prior rail lines and near the vehicle wash rack. The sediments under the berths should be sampled. The objective of the sampling is to detect possible contamination from past releases.					
20. DISTRIBUTION / AVAILABILITY OF ABSTRACT <input checked="" type="checkbox"/> UNCLASSIFIED/UNLIMITED <input type="checkbox"/> SAME AS RPT. <input type="checkbox"/> DTIC USERS			21. ABSTRACT SECURITY CLASSIFICATION Unclassified		
22a. NAME OF RESPONSIBLE INDIVIDUAL Rusty Fendik			22b. TELEPHONE (Include Area Code) 301-671-3461/3261		22c. OFFICE SYMBOL BC-CR-89354

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE

18. Base Closure Program, New Orleans Military Ocean Terminal
New Orleans Army Base, Gulf Outport, Naval Support Activity
Environmentally Significant Operations

Unclassified

SECURITY CLASSIFICATION OF THIS PAGE

DISCLAIMER

This Enhanced Preliminary Assessment report is based primarily on the environmental conditions observed at the New Orleans Military Ocean Terminal, located in New Orleans, Louisiana, on 24 October 1989. Past site conditions and management practices were evaluated, based on readily available records and the recollections of people interviewed. Every effort was made, within the scope of the task, to interview all identified site personnel, especially those personnel with a historical perspective of site operations.

No environmental sampling was conducted as part of the assessment. The findings and recommendations for further action are based on WESTON's experience and technical judgment, as well as current regulatory agency requirements. Future regulations as well as any modifications to current statutes may affect the compliance status of this site.

WESTON does not warrant or guarantee that the property is suitable for any particular purpose or certify any areas of the property as "clean." A more thorough investigation, including intrusive sampling and analysis for specific hazardous materials, is recommended prior to reporting this property as excess.

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EXECUTIVE SUMMARY

BACKGROUND AND OBJECTIVES

This Enhanced Preliminary Assessment (PA) report has been prepared by Roy F. Weston, Inc. (WESTON) at the request of the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) pursuant to Contract DAAA15-88-D-0007, Task Order 2. The purpose of the PA report is to present WESTON's findings concerning the environmental conditions at the New Orleans Military Ocean Terminal (New Orleans (MOT) in New Orleans, Louisiana, and to provide recommendations for further action.

The objectives of the PA were to:

- Identify and characterize environmentally significant operations (ESOs) associated with the historical and current use of the New Orleans MOT property.
- Identify and characterize possible impacts of the ESOs on the surrounding environment.
- Identify additional environmental actions, if any, that should be implemented for the ESOs identified.

Information contained in this enhanced PA report was obtained through:

- Visual inspection of the facility.
- Review of available Army documentation.
- Review of related regulatory agency files at the state and federal levels.
- Interviews with current employees at New Orleans MOT.

GENERAL PROPERTY DESCRIPTION

New Orleans MOT is located at the intersection of the Mississippi River and the Inner Harbor Navigational Canal. Construction of the New Orleans MOT was completed in 1919. In 1922, fire destroyed the wooden wharves and the wharhouse. Reconstruction of the facility was completed in 1942. New Orleans MOT is currently the responsibility of the Army with the U.S. Maritime Administration and the Board of Commissioners, Port of New Orleans, the current tenants. New Orleans MOT is located adjacent to a Naval Support Activity (NSA).

The facility can be divided into two major activities: warehousing and shipping and privately owned vehicle (POV) shipment preparation. New

Orleans MOT has had the assignment to ship materials through New Orleans since 1919, although this activity was interrupted to an uncertain extent from 1922 to 1942. Currently a wide range of equipment and material is processed through this facility including:

- Military equipment
- Privately owned vehicles.
- Supplies for Post Exchanges (PXs).
- Ordnance.
- Chemicals and Compressed Gases.

These duties and materials handled have not changed significantly since World War II.

ESOs identified on the property include:

- Underground Storage Tanks (USTs). Three active, one inactive, three former, and three potential tanks were identified. The three former tanks were removed in 1982; one was found to be leaking. The extent of cleanup is unknown. Three tanks were subsequently installed as replacements. The active tanks store gasoline and diesel fuel for vehicles used onsite. Installation of monitoring wells around the known tanks is scheduled. Any remaining contamination from the former leaking tank will be discovered by the groundwater monitoring of these wells. Two potential tanks were identified as a fuel station. The pumps were removed in 1979, but the tanks are believed to have been left in place.
- Transformers. Nineteen transformers at six stations were identified. These units have not been tested for polychlorinated biphenyls (PCBs) and are the operational responsibility of the NSA. The transformers are in good condition and there is no visual evidence of spills in the past.
- Fuel Unloading Area. Gasoline is pumped out of privately-owned vehicles in preparation for shipment. This fuel is stored in an underground storage tank and subsequently reused within the facility.
- Vehicle Wash Rack. A concrete pad was reported to have been used for vehicle washing. The surrounding area is unpaved. Washwater would have seeped into the surrounding soil. There is no information regarding vehicle maintenance on this pad.
- Railroad Tracks. A large railyard formerly covered approximately 320,000 sq ft of the property. Many of the lines have been removed or paved over with asphalt. This area is a source of contamination from spills or petroleum, oil and lubricants (POL) and solvents from train activities during loading/unloading operations.
- Berths 1 to 5. These berths have been used since World War II for general storage and warehousing operations. The variety of

hazardous materials stored currently is quite extensive and includes munitions, compressed gases, corrosives, flammables, and oxidizers. The floor of the facility is concrete with holes drilled to allow discharge directly to the Mississippi River or fill sediment under the berth. The largest container present at the time of the survey was a 55-gal drum. Approximately 2,000 gal of hazardous material was surveyed.

- Asbestos. Transite siding was tentatively indentified on Buildings 623 and 624. This material is known to contain asbestos fibers. None of the buildings have been surveyed for asbestos.

The identified ESOs for New Orleans MOT are shown in Figure 3-1.

HUMAN AND ENVIRONMENTAL RECEPTORS

The area surrounding New Orleans MOT is heavily populated with commercial activities along the river. The property is located within a floodplain, although it is protected by a levee. There are wetlands within one mile of the facility. At least seven waterbird nesting colonies are found within this portion of the river.

The significant aquifers in this area range from brackish to saline. The shallow groundwater is less than 10 ft below the surface. All registered wells within 3 miles are drilled to a depth of 700 to 800 ft.

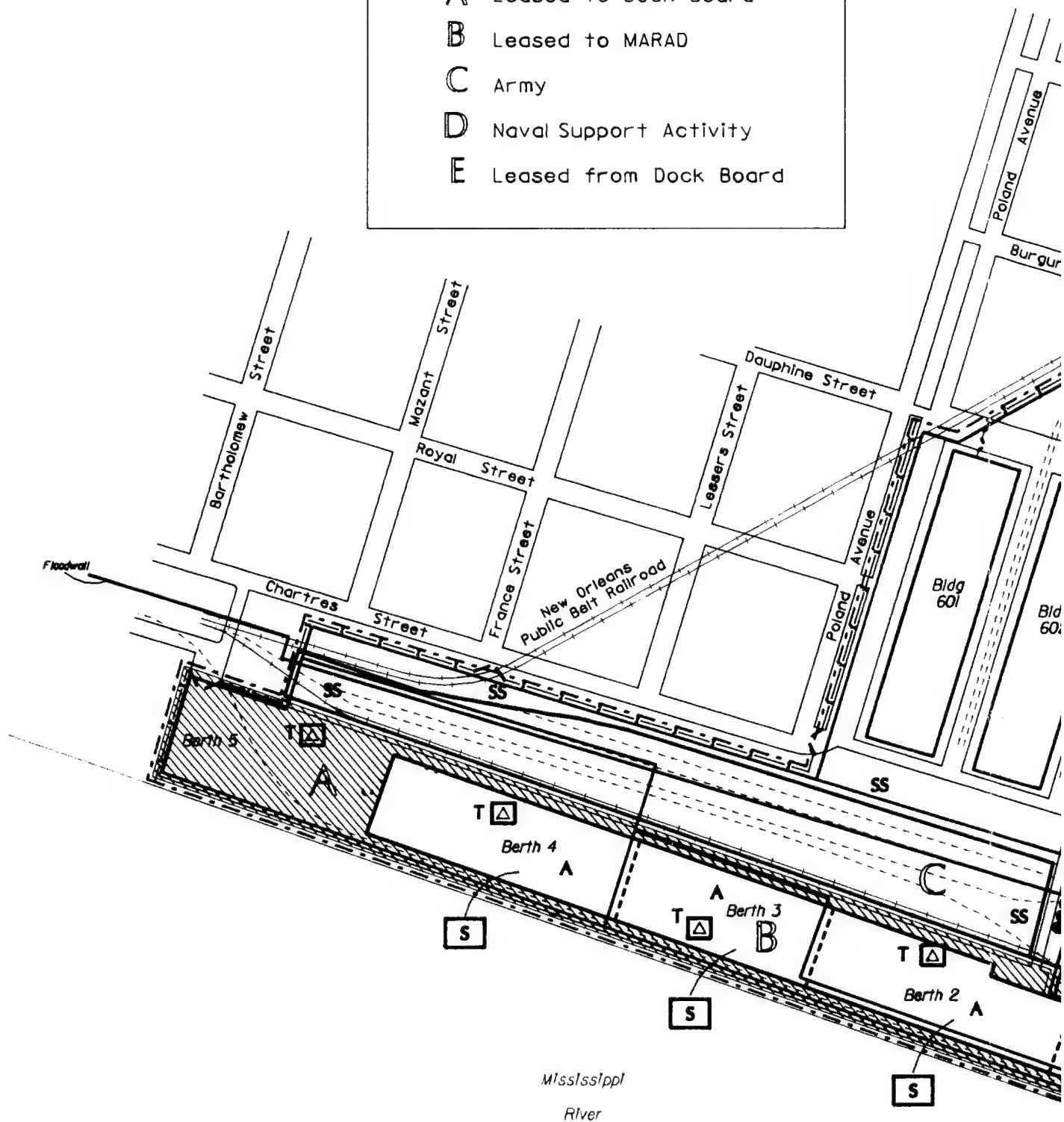
CONCLUSIONS AND RECOMMENDATIONS

No environmental conditions were observed on the property that appear to present an immediate, substantial threat to human health or the environment. The ESOs discussed in the report do have the potential to affect human health or the environment. The recommendations concerning each ESO follow and are summarized in Table ES-1. Recommended sampling locations are shown in Figure ES-1.

- Underground Storage Tanks. No further action is recommended for the identified tanks because monitoring wells are scheduled to be installed. The two potential tank locations should be investigated to ascertain their existence.
- Transformers. All transformers should be tested for PCBs.
- Fuel Unloading Area. The building's trench drains provide the most likely pathway for the migration of contaminants. The sewer sediments should be sampled and analyzed for total petroleum hydrocarbons (TPH).
- Vehicle Wash Rack. The surrounding soil should be sampled because washwater that may have contained oil and grease would have drained to the surrounding ground. The sample collected should be analyzed for TPH and RCRA metals.

SITE LAND USE

- A Leased to Dock Board
- B Leased to MARAD
- C Army
- D Naval Support Activity
- E Leased from Dock Board



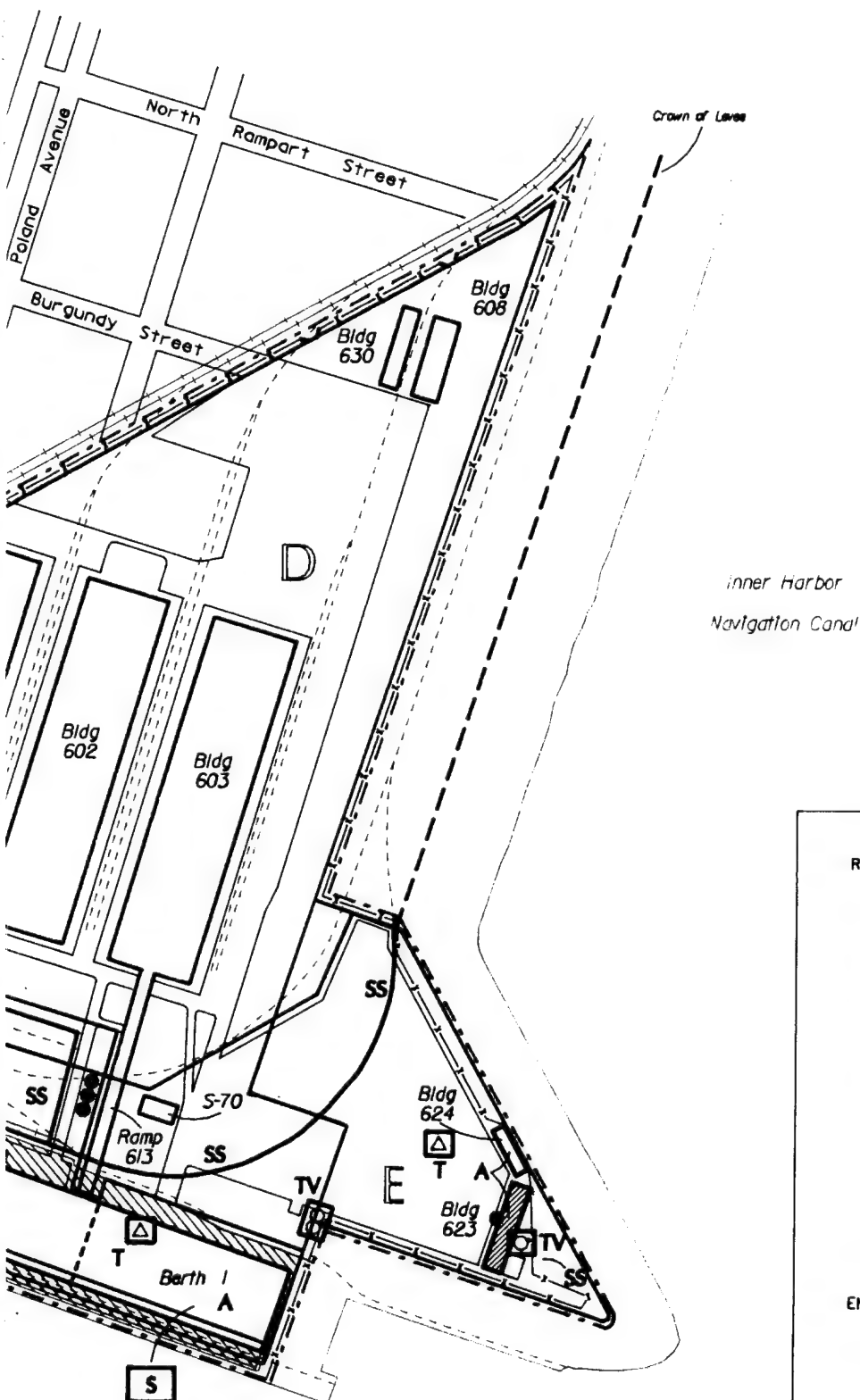
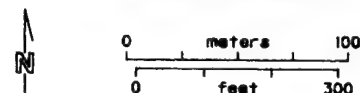
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New Orleans
Military Ocean Terminal
New Orleans, LA - November 1989

Figure ES-1
Property Information
Composite

Compiled in 1989 from various sources
provided by the U.S. Army Toxic and
Hazardous Materials Agency



RECOMMENDED SAMPLING METHODS

- T** Transformer Oil
- SS** Surface Soil
- A** Asbestos
- TV** Tank Verification
- S** Sediment (Below Berths 1-4)

NOTE: Asbestos sampling is
recommended for all buildings.

ENVIRONMENTALLY SIGNIFICANT OPERATIONS

- Potential Underground Storage Tank
- Underground Storage Tank
- △ Transformer
- ◇ Building 623-Vehicle Defueling
- Vehicle Wash Rack
- ▣ General Storage and Material Hauling
- - - Former Railroad
- + + + Current Railroad

NOTE: Possible asbestos-containing
materials present in buildings
623, 624 and berths 1 through 4.

Table ES-1

ESOs Identified at New Orleans MOT and Recommendations for Further Action

ESO	Contaminants of Concern	Recommended Activity	Number of Samples	Location	Sample Type	Analysis
Underground Storage Tanks	Petroleum hydrocarbons	No further action	—	Next to Ramp 613	---	---
Underground Storage Tank	Petroleum hydrocarbons	No further action	—	In front of Building 623	---	---
Potential Underground Storage Tank	Petroleum hydrocarbons	Site Investigation		Next to boat ramp	Tank verification	
Potential Underground Storage Tank	Unknown	Site Investigation		Behind Building 623	Tank verification	
Transformers	PCBs	Site Investigation	1/transformer	Each transformer	Transformer oil	PCBs
Fuel Unloading Area	Petroleum hydrocarbons	Site Investigation	1	Floor drain	Drain sediments	TPH
Vehicle Wash Rack	Petroleum hydrocarbons	Site Investigation	2	Along drainage path	Soil	TPH and RCRA metals
Railroad Tracks	Creosote, ordnance, solvents, chemicals	Site Investigation	10 composite	Distributed through railway	Soil	TPH, pesticides, and BNAs
Berths 1 - 5	Ordnance, solvents, chemicals	Site Investigation	Approximately 15 composite	Sediments present under drains	Sediment	Priority pollutants
Asbestos	Asbestos	Site Investigation		Buildings 623 and 624 and Berths 1-4	Asbestos survey	Asbestos

- Railroad Tracks. POL, solvents from train activities, and hazardous materials from potential spills during unloading may be present in the soil. Soil samples should be collected where tracks are still present or were in the past. Approximately 40 sampling locations are recommended. These samples should be composited into a total of ten samples and analyzed for TPH, pesticides, and base neutral acid extractable compounds (BNAs) on EPA's priority pollutants list.
- Berths 1 to 5. Drainage holes drilled through the floors of the berths provide the most likely pathway for the migration of contaminants. These holes drain to the Mississippi River or fill sediment under the berths. Although there are no spills on record, it is possible that spills occurred in the past. The fill sediment should be sampled under the drains. The samples should be analyzed for priority pollutants, given the uncertainty of the chemicals which may have been spilled.
- Asbestos. An asbestos survey is recommended for the entire facility because none has been performed to date.



SECTION 1

INTRODUCTION

1.1 BACKGROUND

Roy F. Weston, Inc. (WESTON) has been retained by the U.S. Army Toxic and Hazardous Materials Agency (USATHAMA) to conduct waste site characterizations of specific Department of Army properties under the authority of Contract DAAA15-88-D-0007, Task Order 2. This work is being performed within the scope of the U.S. Army Installation Restoration Program (IRP). As part of this contract, WESTON has also been asked to prepare enhanced preliminary assessment (PA) reports of selected properties destined to be included as part of the Base Closure Program. The PA reports are to present WESTON's findings concerning the environmental conditions of the properties and to provide recommendations for further action. These recommendations will serve as a guide to the U.S. Army in prioritizing the activities required to report these properties as excess.

This report discusses the enhanced preliminary assessment of the New Orleans Military Ocean Terminal (New Orleans MOT). A site visit was performed on 24 October 1989.

1.2 OBJECTIVES

This enhanced PA report was prepared using existing information obtained from property records and from current employees. No sampling activities were completed as part of this assessment.

The overall objectives of the PA were as follows:

- Identify and characterize environmentally significant operations (ESOs) associated with the historical and current use of the New Orleans MOT property.
- Identify and characterize possible impacts of the ESOs on the surrounding environment.
- Identify additional environmental actions, if any, that should be implemented for the ESOs identified.

Certain issues have been excluded from consideration as ESOs for the purposes of this report. First, painted surfaces will not be identified as ESOs solely because there is a potential for their containing lead. Second, drinking water will not be designated as an ESO solely because there is a potential for lead contamination due to piping solder or piping materials. Third, the presence of radon gas in buildings will not be considered as an ESO. A radon survey of all buildings will be performed utilizing the guidelines set forth in the Army Radon Program.

1.3 PROCEDURES

The information contained in this enhanced PA report is based on the following data-gathering activities:

- Visual inspection of the facility.
- Review of available Army documentation.
- Review of U.S. Environmental Protection Agency Region VI files.
- Contact with the Louisiana Department of Environmental Quality.
- Interviews with current employees at New Orleans MOT.

No sampling or analysis was conducted as part of the investigation.

1.4 REPORT FORMAT

This enhanced PA report presents an evaluation of the relevant data for the New Orleans MOT site.

Section 2 describes the property and the surrounding environment and land uses. Section 3 identifies and characterizes all ESOs related to known and suspected releases to the environment. Section 4 discusses the potential impact of the ESOs on the local environment and human receptors. Section 5 summarizes the findings and conclusions, discusses the quality and reliability of the supporting information, identifies areas requiring further action, and suggests how such actions may be accomplished. Section 6 lists the pertinent materials reviewed and the agencies that were contacted. Photographs taken during the site visit are provided in Section 7. Supporting documentation is provided in Appendices A through F.

References are presented throughout this report, where appropriate, by means of a letter and number designation in brackets, as follows: I refers to Direct Interviews; T refers to telephone conversations; and R refers to Reports or other written documents. The number following the letter refers to the specific item in the respective lists provided in Section 6.

SECTION 2

PROPERTY CHARACTERIZATION

2.1 GENERAL PROPERTY INFORMATION

New Orleans MOT is located on the northwest intersection of the Mississippi River and the Inner Harbor Navigational Canal (Mississippi River-Gulf Outlet Canal) within the corporate limits of New Orleans, Louisiana. This installation is also known as the New Orleans Army Base and as the Gulf Outport. An area map and a property information summary are shown in Figure 2-1 and Table 2-1, respectively.

New Orleans MOT is comprised of property operated by the Army, property used by the U.S. Maritime Administration (MARAD) per an Interservice Support Agreement (ISSA), property leased to the Board of Commissioners, Port of New Orleans (Dock Board), and property leased from the Dock Board. This land belongs to the city with all improvements belonging to the Army. Contiguous to the facility is the Naval Support Activity (NSA). A site map of the facility with property divisions is shown in Figure 2-2.

2.2 DESCRIPTION OF FACILITIES

2.2.1 GENERAL PROPERTY DESCRIPTION AND HISTORY

Construction of New Orleans MOT was completed in 1919. On 15 September 1922 fire destroyed the wooden wharves and wharfhouse. Reconstruction of the facility continued in three stages until completion of Berths 1 through 4 in 1942. Berth 5 was added in 1945. Berths 1 through 4 are enclosed and Berth 5 is open (photos 1, 2) [R-4].

All of the berths are built on timber pile foundations and consist of reinforced concrete and structural steel above the water level. The structures cover a total of approximately 499,711 sq ft (11.47 acres). Transit sheds cover Berths 1 through 4 for a total enclosed area of approximately 281,848 sq ft. Berths 1, 2 and part of 3 are used by New Orleans MOT. The rest of Berth 3 and the wharf space in front of Berths 1, 2, and 3 are leased to MARAD. Berths 4 and 5 and the remaining wharf space is leased to the Dock Board. Located on the NSA property are three warehouses that are used to store most of the material processed through New Orleans MOT [I-1; R-4].

The facility can be divided into two major activities: warehousing and shipping, and privately-owned vehicle (POV) shipment preparation. New Orleans MOT has had the assignment of shipping materials through New

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Base Closure Preliminary Assessment
**New Orleans Military
Ocean Terminal**
New Orleans, Louisiana— November 1989

**FIGURE 2-1
PROPERTY LOCATION**

100-Year Flood Plain 500-Year Flood Plain

Property boundary shown in red. Base map image is from the USGS 7.5' Series quadrangle New Orleans East, LA., 1966 (PR 1972 and 1979).

Scale
1:30,000

0 3000
0 1000
Feet
Meters



TEXAS

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NEW ORLEANS M.O.T.

New Orleans

Gulf of Mexico

**New Orleans Military
Ocean Terminal**

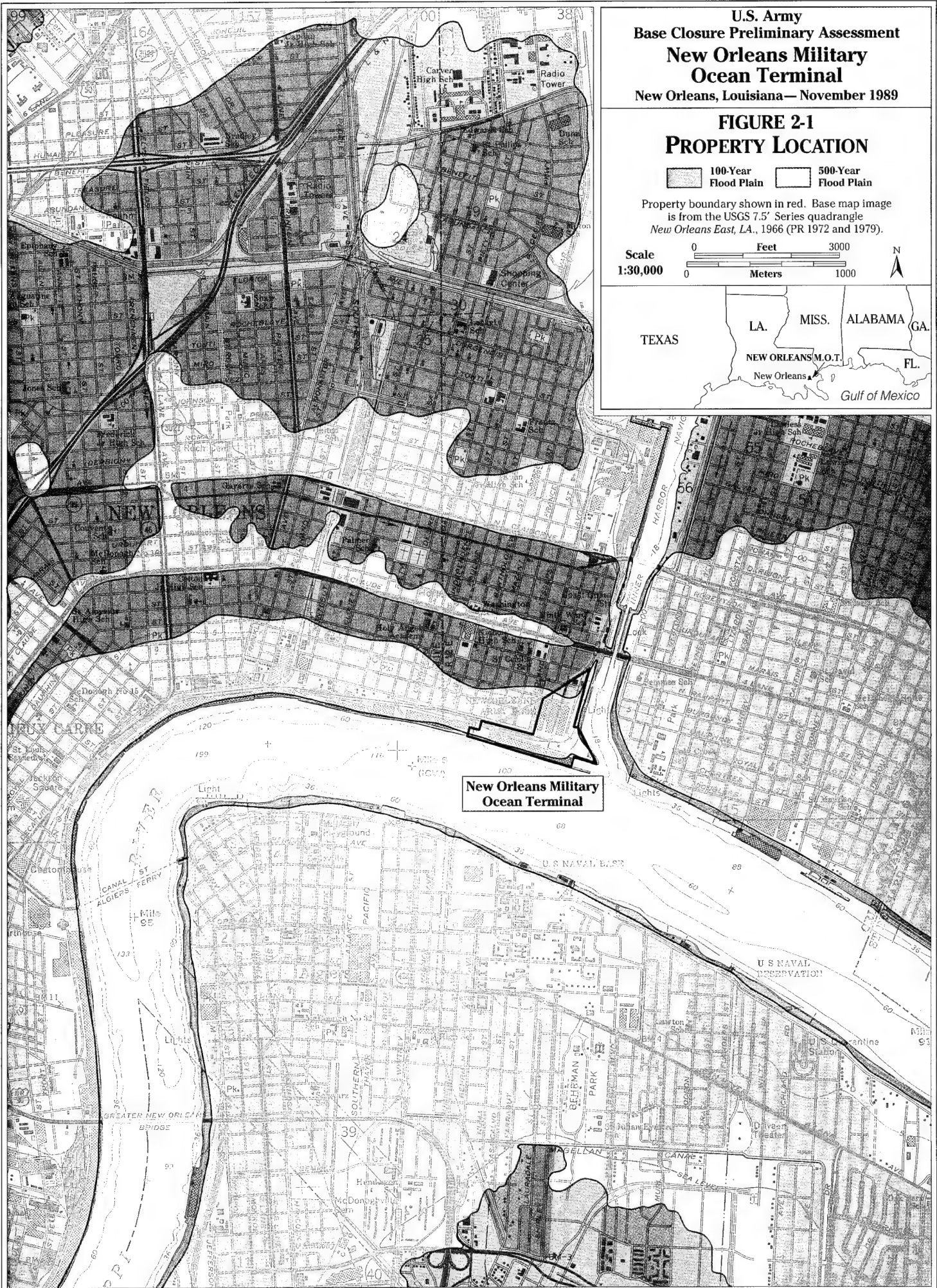




Table 2-1

Property Information Summary

Name: New Orleans Military Ocean Terminal

Facility Address: Military Traffic Management Command
Gulf Outport
4400 Dauphine Street
New Orleans, LA 70146-6000

FFIS: LA-213522703

Property Number: 22585

Command: Military Traffic Management Command

County: Orleans Parish

Location: At the northwest intersection of the Mississippi River and the Inner Harbor Navigation Canal (Mississippi River-Gulf Outlet Canal) within the corporate limits of New Orleans, Louisiana.

Installation Coordinates: 29°57'N; 90°01'W

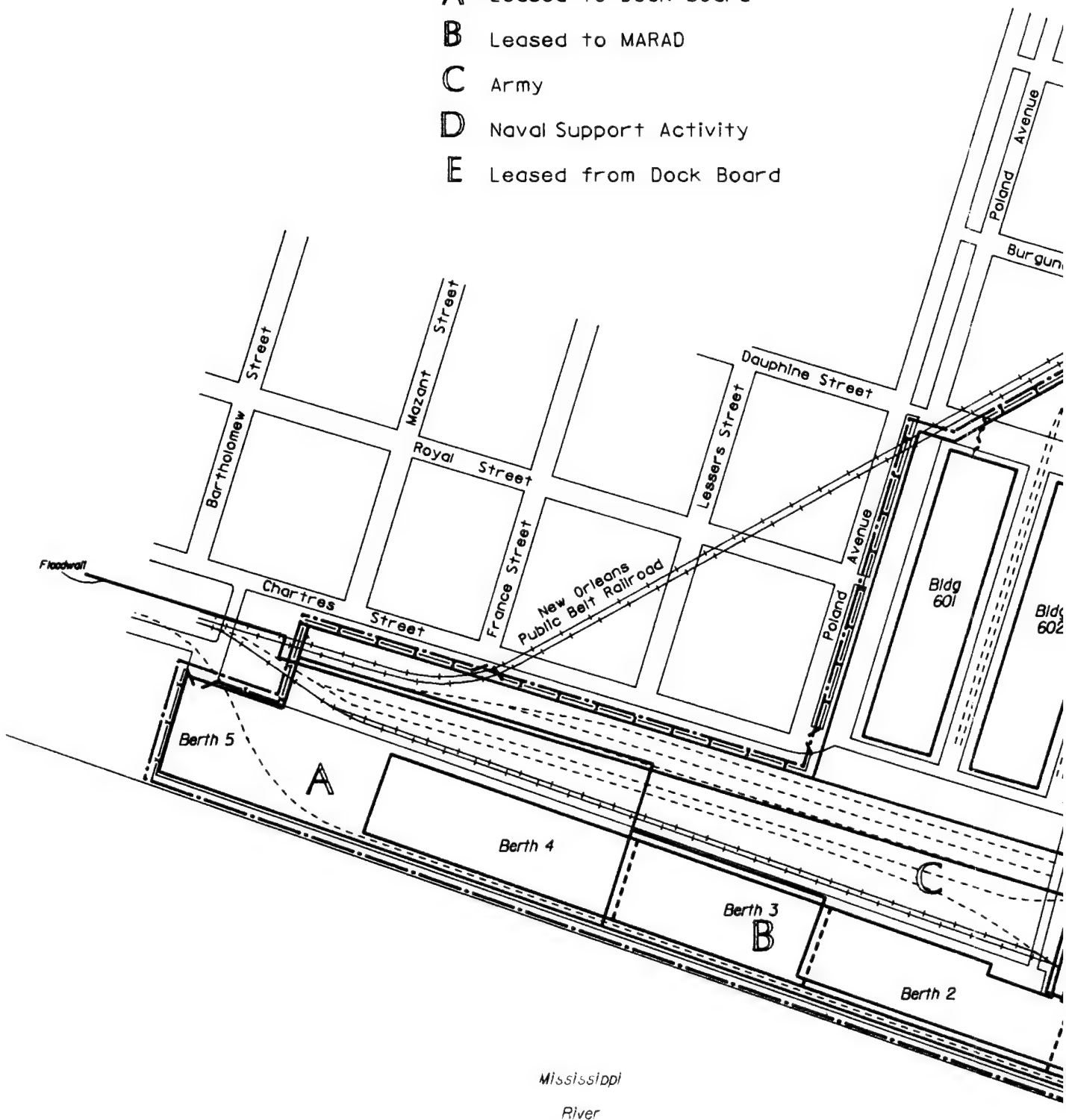
Size: 14.99 acres

Mission: To provide common user terminal services for Department of Defense (DoD) sponsored cargo through Gulf Coast ports from Brownsville, Texas, to Cape Sable, Florida. Operate privately owned vehicle (POV) Processing Center, Granite City, Illinois

Operations: Current operations include warehouse and shipping activities and POV vehicle pre-shipment maintenance.

SITE LAND USE

- A** Leased to Dock Board
- B** Leased to MARAD
- C** Army
- D** Naval Support Activity
- E** Leased from Dock Board



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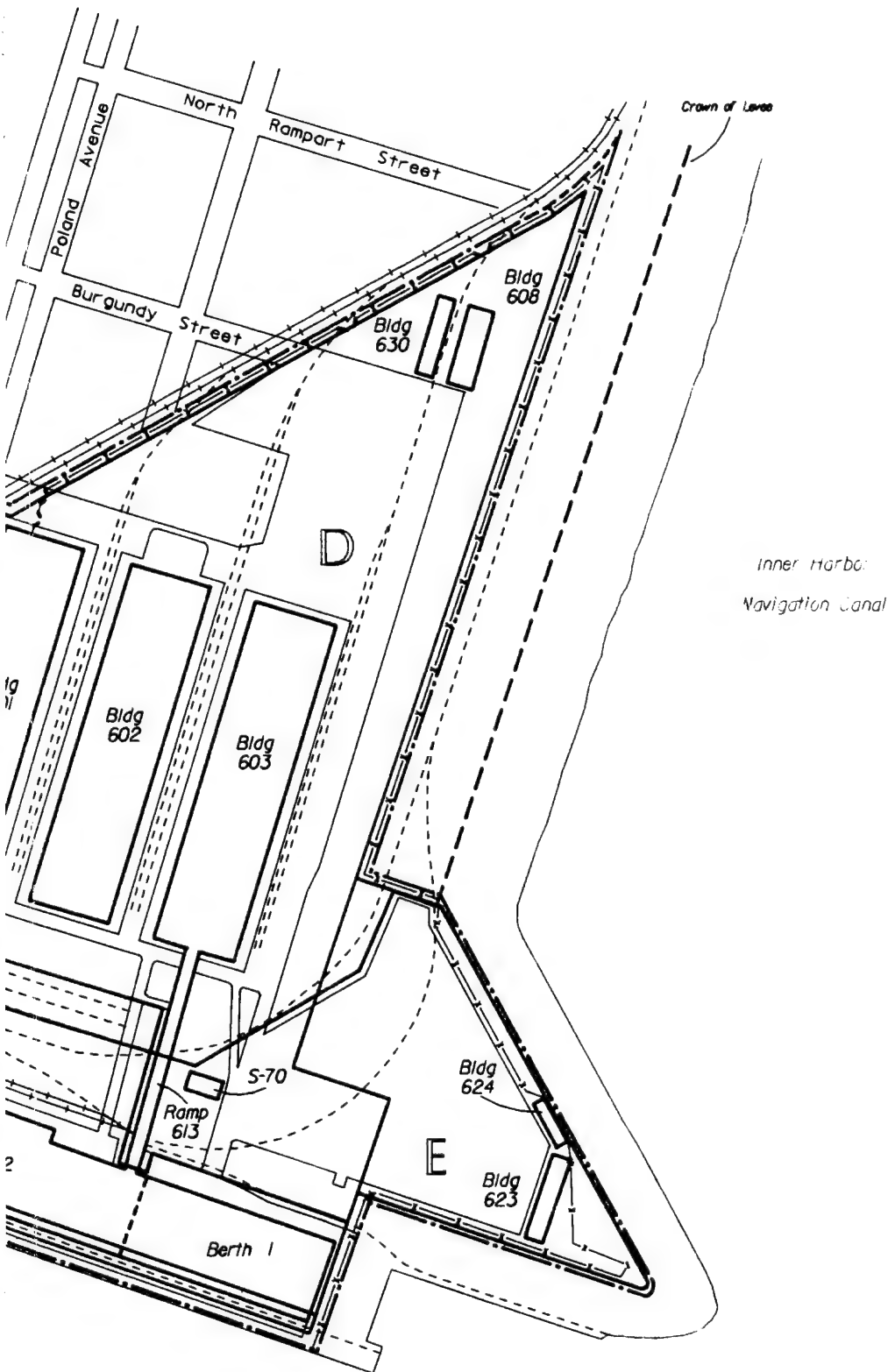
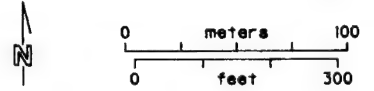
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----- Former Railroad

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New Orleans, LA - November 1989

Figure 2-2
Site Plan With
Land Use

Compiled in 1989 from various sources
provided by the U.S. Army Toxic and
Hazardous Materials Agency



Orleans since 1919, although this activity was interrupted to an uncertain extent from 1922 to 1942. Currently a wide range of equipment and material is processed through this facility including:

- Military equipment.
- POVs.
- Supplies for post exchanges (PXs).
- Ordnance.
- Chemicals and compressed gases.

The equipment and materials handled have not changed significantly since World War II. A more detailed breakdown of equipment and materials handled is provided in Appendix A. A detailed discussion of the identified ESOs as they relate to hazardous materials handled is presented in Section 3.

Also present at this installation is a POV processing center and shipping facility. All fuel is removed from the vehicles prior to shipment. Outdoor POV storage consists of approximately 9.04 acres leased from the Dock Board and NSA.

2.2.2. GENERATION AND DISPOSAL OF WASTES

Solid waste is stored in roll-off containers prior to its disposal by a private contractor. The current contractor is River Parish Disposal, Inc. There is no generation or disposal of hazardous waste at the facility. Sanitary wastewater is discharged to the city sanitary sewer system.

2.3 PERMITTING STATUS

The following agencies were contacted regarding the status of permits for New Orleans MOT [T-1; R-8, R-9]:

- EPA Region VI - no permits.
- Louisiana Department of Environmental Quality (DEQ), Office of Air Quality and Nuclear Energy - no permits.
- Louisiana DEQ, Office of Water Resources - no permits.
- Louisiana DEQ, Office of Solid and Hazardous Waste - no permits.

The facility's EPA Hazardous Waste Generator I.D. Number is LA5-21-359-9314 (Appendix B). However, the facility has identified itself as a non-generator of hazardous waste. There is no record of any hazardous waste manifested [T-1]. New Orleans MOT also submitted an Underground Storage Tank Registration, listing four tanks (Appendix C). The status of these tanks will be discussed in greater detail in Subsections 3.1 and 3.2.

2.4 GENERAL ENVIRONMENTAL INFORMATION

2.4.1 DEMOGRAPHICS AND LAND USE

New Orleans MOT is located on the Mississippi River in New Orleans. The surrounding land is mainly residential with some commercial activity. Other shipping and warehousing operations are located along the river.

No nearby contamination sources were identified in the Comprehensive Environmental Response, Compensation Liability Inventory System (CERCLIS) listing for New Orleans (Appendix D). Other than local port operations along the river, no likely sources were identified either during personnel interviews or the site survey [I-1, I-2].

2.4.2 CLIMATE

The climate of New Orleans is humid and semi-tropical during a large portion of the year. New Orleans is virtually surrounded by water. The water bodies include the Gulf of Mexico, Lake Pontchartrain, Lake Borgne, and numerous bayous, lakes, and marshy delta land. These water bodies have a significant influence on the climate. New Orleans is south of the usual track of winter storms, but occasionally a storm center will form in the Gulf of Mexico.

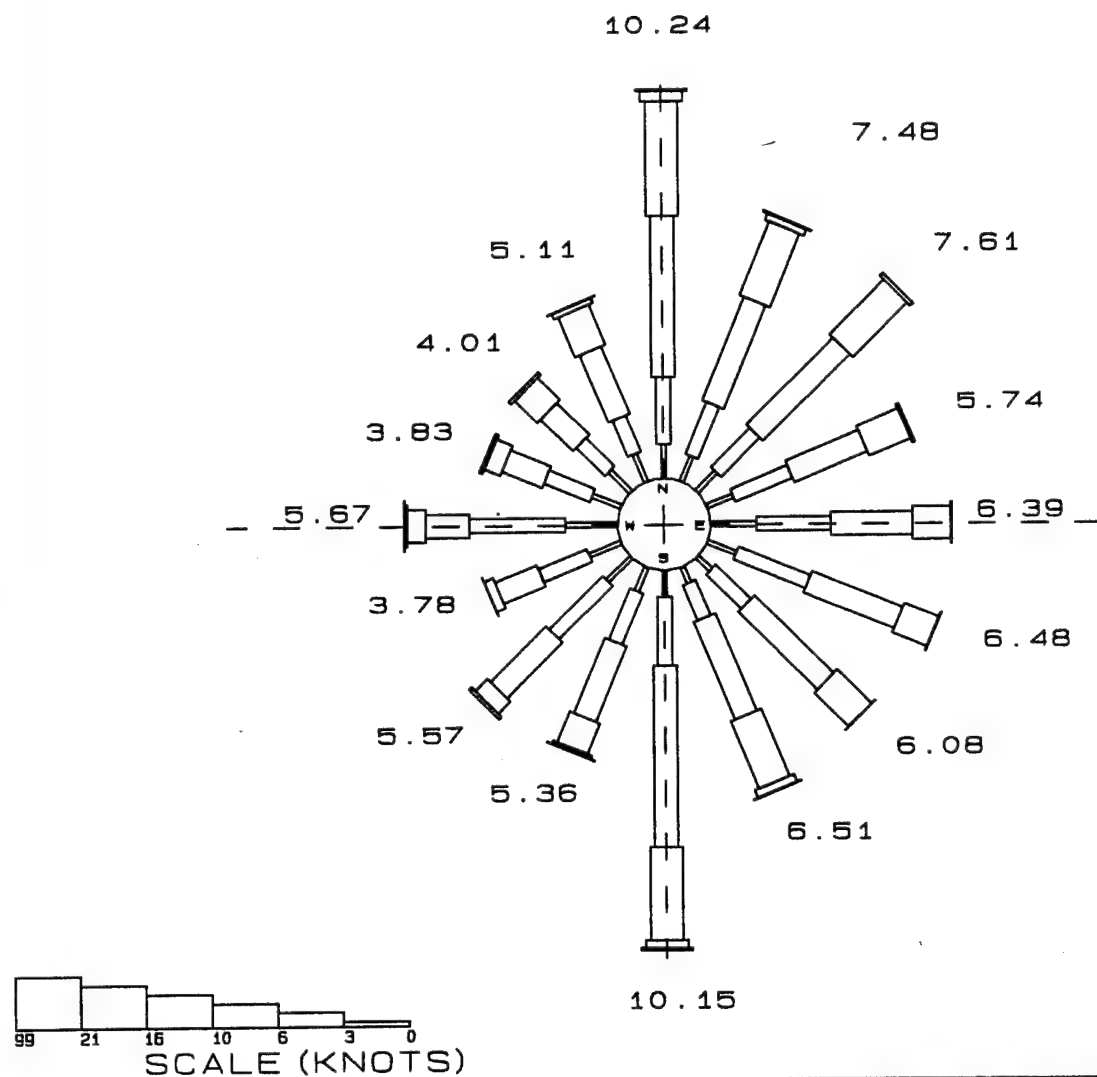
Figure 2-3 shows wind conditions for New Orleans for the year 1988. The wind direction at New Orleans is fairly evenly distributed. North winds occur most frequently with a secondary maximum of south winds. Summer winds have a prevailing southerly direction providing moisture favorable for the formation of afternoon thunderstorms. West to northerly winds cause periods of hot dry weather during the summer.

Precipitation is fairly evenly distributed throughout the year. A definite rainy period occurs from December to March. Summer precipitation occurs mainly from frequently heavy showers and thundershowers. July (6.73 in.), August (6.02 in.) and September (5.87 in.) are the wettest months. October is the driest month with normal precipitation of 2.66 in. The maximum monthly precipitation recorded was 25.11 in. during October 1937. Snowfall is rare with a annual mean value of 0.1 in.

Temperatures are moderated by the surrounding water bodies. July is the hottest month with a normal monthly temperature of 82.1°F and a daily maximum of 90.7°F and a daily minimum of 73.5°F. The daily maximum temperature during June (89.5°F), July (90.7°F), and August (90.2°F) show little variation. January is the coldest month with a normal monthly temperature of 52.4°F, and a daily maximum of 61.8°F and daily minimum of 43.0°F.

Severe thunderstorms with damaging winds and hail are infrequent. Thunderstorms with heavy rains are common. Thunderstorms occur on an average of 68 days per year. Tornadoes are rare, but water spouts occur quite often on nearby lakes. Hurricanes and tropical storms do move close enough to New Orleans to affect the area. Tropical storms can produce high winds, heavy rain, flooding, and tornadoes. Severe damage can occur during tropical storms. Although these storms have occurred in the past, the frequency of occurrence is quite low [R-10, R-11].

NEW ORLEANS, LOUISIANA
YEAR: 1988
CALMS INCLUDED



	WIND SPEED (KNOTS)							WIND SPEED (KNOTS)					
	0-3	3-6	6-10	10-16	16-21	>21		0-3	3-6	6-10	10-16	16-21	>21
N	0.90	1.81	4.26	2.97	0.27	0.03	N	0.71	1.87	4.83	2.48	0.19	0.07
NNE	0.71	1.50	2.97	2.08	0.17	0.03	SSW	0.70	1.49	2.17	0.89	0.09	0.02
NE	0.72	1.47	3.28	2.04	0.10	0.00	SW	0.89	2.03	2.11	0.46	0.09	0.00
ENE	0.73	1.64	2.11	1.20	0.07	0.00	WSW	0.91	1.39	1.22	0.25	0.01	0.00
E	1.21	1.97	2.16	1.01	0.03	0.00	W	1.38	2.55	1.16	0.49	0.08	0.01
ESE	0.82	2.06	2.60	0.98	0.02	0.00	WNW	0.81	1.32	1.15	0.46	0.09	0.00
SE	0.49	1.32	2.97	1.27	0.02	0.00	NW	0.79	1.07	1.21	0.84	0.10	0.00
SSE	0.46	1.04	2.82	1.96	0.22	0.01	NNW	0.79	1.05	1.96	1.15	0.15	0.01

FIGURE 2-3 WIND ROSE

2.4.3 SURFACE WATER AND PHYSIOGRAPHY

New Orleans MOT lies below the mean highwater of the Mississippi River. The facility is located within a Zone B area, "areas protected by levees from the base flood" [R-12]. The levee has a crest elevation of 24 ft above the Mean Gulf Level (MGL). The river serves as a public drinking water source and is a vital corridor of industrial and commercial activity. Two water treatment plants pump water from the Mississippi River to serve the New Orleans metropolitan area. Both water intakes are located upriver from New Orleans MOT [T-2].

2.4.4 SOILS

New Orleans is underlain by thick sequences of unconsolidated deposits of sand, silt, clay, and gravel. Subsurface materials in the New Orleans area consist of recent flood plain and deltaic alluvial deposits associated with river deposits and marshlands. Zones of organic clay characteristic of backswamp material are mixed with these sediments. Loess, a wind-derived sediment composed predominantly of silt-sized grains, may also be present in some areas. Soil material generally consists of silty clays interrupted by dense clay lenses that impede the downward migration of surface water. These materials are deposited in a structural trough known as the Mississippi embayment that plunges gulfward. The resulting wedge of sediments thickens seaward with a prevailing dip to the south [R-3].

The soil consists of lean to fat clays, silts, and fine sands, and contain beds of organic materials and peat bogs up to 10 feet thick. All soils are saturated. Soils vary in makeup from almost nonplastic silts to highly plastic clays, and they contain varying amounts of sand and organic debris [R-4].

2.4.5 GROUNDWATER AND HYDROLOGY

In the New Orleans area, usable quantities of fresh groundwater are difficult to encounter at any depth below the ground surface. The groundwater at the facility was reported as brackish and is believed to be generally 8 to 10 ft below ground. This shallow aquifer is expected to flow toward the river when the river is in low stage and away when the river is high. The shallow aquifers, less than 150 ft, that may exist have low yields. These water-bearing deposits include point bar and distributary channel deposits associated with the Mississippi River [R-2, R-3].

There are approximately 10 registered wells within 3 miles of the facility in the area north of the Mississippi River and west of the Gulf Outlet Canal (Appendix E). The nearest well is located within 1,000 ft of the facility. This well is expected to be brackish. All wells are drilled to a depth of 700 to 800 ft. None of these wells are used as a drinking water source [R-1]. The aquifer pumped in each case is the Gonzales-New Orleans Aquifer. As of 1981 the saltwater-freshwater interface is one mile north of the facility. The other major deep aquifers are also brackish or saline in this area [R-2].

2.4.6 FLORA AND FAUNA

The majority of New Orleans MOT is paved. On the unpaved areas, grasses, some shrubs and small trees are present. There are no permanent examples of fauna other than rodents and birds. A list of fauna found in New Orleans is provided in Appendix F.

2.4.7 SENSITIVE ENVIRONMENTS

There is no evidence of sensitive wildlife within 3 miles of the facility. The pallid sturgeon, a species proposed for listing, and the salt marsh top minnow, a rare fish, have been detected in the Mississippi River, south of New Orleans. There are wetlands within one mile of the facility. There are at least seven waterbird nesting colonies in this portion of the river and also in the deltaic marshes (Appendix F).

SECTION 3

ENVIRONMENTALLY SIGNIFICANT OPERATIONS

The objective of this section is to document areas where hazardous materials are managed and to identify known or potential releases of these materials into the environment and their likely migration pathways. The locations of all identified ESOs are depicted in Figure 3-1.

3.1 UNDERGROUND STORAGE TANKS (RAMP 613)

3.1.1 DESCRIPTION

Three 1,000-gal, single-wall fiberglass tanks are located adjacent to Ramp 613 (photo 3). The tanks are equipped with steel piping. Each tank was installed in 1982 to replace similar steel tanks that had been in place since the 1940s. Diesel fuel for vehicles is stored in Tank 601-1. Tank 601-2 was previously used to store waste fuel. It is currently inactive and reportedly empty. Gasoline is stored in Tank 601-3. These tanks are registered with the state [R-5]. Four monitoring wells for leak detection are planned to be installed before January 1990 [I-2]. The ground above these tanks is paved.

3.1.2 KNOWN AND SUSPECTED RELEASES

One of the three tanks replaced in 1982 was found to be leaking [R-5]. The specific tank that leaked and the extent of cleanup that occurred is unknown. The current tanks were leak tested at installation; no leaks were detected.

3.2 UNDERGROUND STORAGE TANKS (BUILDING 623)

3.2.1 DESCRIPTION

One 1,000-gal steel tank with steel piping is located west of Building 623. This tank, installed in the 1940s, is used to store fuel mixtures removed from vehicles during pre-shipment processing and is registered with the state [I-2; R-5]. This fuel is reused to operate onsite vehicles. Three monitoring wells for leak detection are planned for installation before January 1990. The ground above this tank is paved.

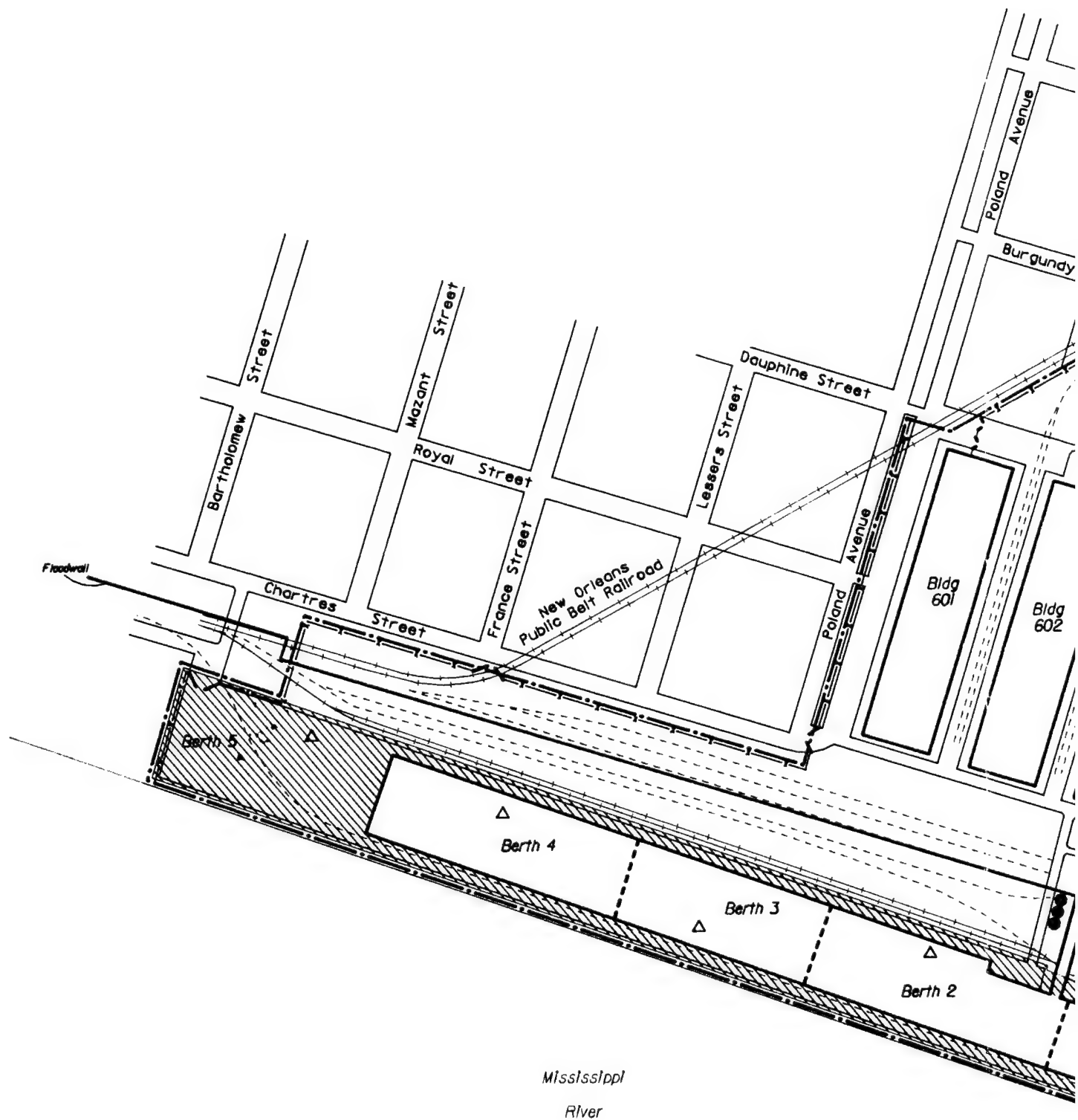
3.2.2 KNOWN AND SUSPECTED RELEASES

This tank was leak tested in 1988 and no leaks were detected.

3.3 POTENTIAL UNDERGROUND STORAGE TANKS (BOAT RAMP)

3.3.1 DESCRIPTION

In the past, a fuel pump area was located adjacent to the boat ramp. The gasoline pumps were removed in 1979. It is believed that two tanks were



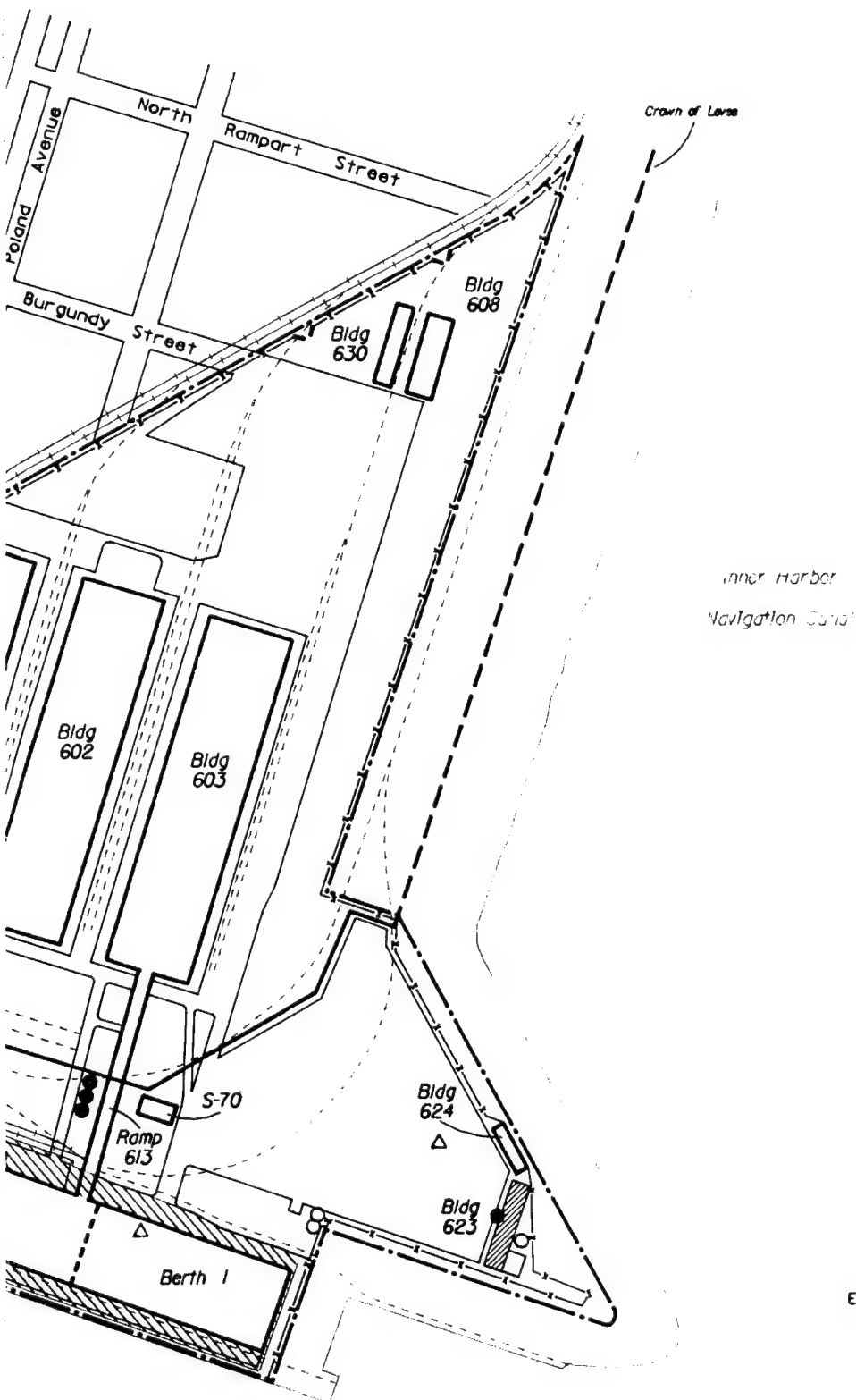
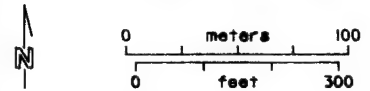
USATHAMA

U.S. Army Toxic and Hazardous Materials Agency

U. S. Army
Base Closure Preliminary Assessment
New Orleans
Military Ocean Terminal
New Orleans, LA - November 1989

Figure 3-1
Environmentally Significant
Operations

Compiled in 1989 from various sources
provided by the U.S. Army Toxic and
Hazardous Materials Agency



ENVIRONMENTALLY SIGNIFICANT OPERATIONS

- Potential Underground Storage Tank
- Underground Storage Tank
- △ Transformer
- ◊ Building 623-Vehicle Defueling
- Vehicle Wash Rack
- ▣ General Storage and Material Hauling
- - - Former Railroad
- + + + Current Railroad

NOTE: Possible asbestos-containing
materials present in buildings
623, 624 and berths 1 through 4.

not removed at that time and remain in the ground. The sizes of the tanks, if present, are not known [I-2; R-5]. This area is paved.

3.3.2 KNOWN AND SUSPECTED RELEASES

There is no record of any testing done at the time the fuel pumps were removed.

3.4 POTENTIAL UNDERGROUND STORAGE TANK

3.4.1 DESCRIPTION

During the site survey, 1/4-in. steel piping was discovered that led underground behind Building 623, which could indicate a potential tank. However, there is no record of a tank in this location.

3.4.2 KNOWN AND SUSPECTED RELEASES

There is no evidence of vegetation stress in the area.

3.5 TRANSFORMERS

3.5.1 DESCRIPTION

Six transformers stations were identified during the site survey. All 19 transformers appeared to be in good condition with only slight corrosion visible (photo 4). None of the transformers has been tested for PCBs [I-2].

3.5.2 KNOWN AND SUSPECTED RELEASES

There are no visible leaks or stains near any of the transformer stations. A potential release from one of the transformers in the berths would affect either the Mississippi River or the fill under the berths. A potential release from the station on the parking lot would likely seep into the ground through cracks in the asphalt and perhaps to the Gulf Outlet Canal through the storm sewer.

3.6 FUEL UNLOADING AREA

3.6.1 DESCRIPTION

In Building 623 (photo 5), a small air-operated pump is used to remove fuel from POVs prior to shipment [I-2]. This mixed fuel is subsequently stored in an underground storage tank (see Subsection 3.2) and used onsite to operate vehicles. Building 623 has a concrete floor with a trench drain in the area. These drains reportedly are connected to the city storm sewer [I-1, I-2].

3.6.2 KNOWN AND SUSPECTED RELEASES

There is no evidence of releases in the area. The floor is clean and the area is well maintained.

3.7 VEHICLE WASH RACK

3.7.1 DESCRIPTION

Prior to 1987, vehicles were washed on a concrete pad behind Building 623 [I-2]. Vehicles have not been washed here since before 1987. There are no drains in the area. The area around the pad is unpaved. There is no information on whether any other maintenance activities, including engine washing, occurred here.

3.7.2 KNOWN AND SUSPECTED RELEASES

Wash water would have runoff to the surrounding ground. There is no evidence of vegetation stress nor visible stains in this area.

3.8 RAILROAD TRACKS

3.8.1. DESCRIPTION

In the past, this facility made extensive use of rail lines to transport materials. Many of the tracks present in 1963 have since been removed or covered by pavement. Rail lines have been used to transport ordnance, chemicals, and other hazardous materials. An extensive rail yard was present behind the berths. In the past, these tracks covered approximately 320,000 sq ft.

3.8.2 SUSPECTED AND KNOWN RELEASES

There is no record of any spills from the unloading or railroad operations [I-1; T-3]. Since spills due to unloading operations are not uncommon, some chemical releases could have occurred. Any contamination probably would have affected the soil and shallow groundwater.

3.9 BERTHS 1 TO 5

3.9.1 DESCRIPTION

These berths have been used since World War II for general storage and warehousing operations. The variety of hazardous materials currently stored is quite extensive and includes munitions, compressed gases, corrosives, flammables, and oxidizers (photos 6, 7, 8). The floor of the facility is concrete with holes drilled to allow discharge directly to the Mississippi River or the fill under the berths. These holes were drilled to permit drainage flow to low spots. The largest container present at the time of the survey was a 55-gal drum. Approximately 2,000 gal of hazardous material was surveyed, based on a drum count. Incompatible materials are not segregated.

3.9.2 SUSPECTED AND KNOWN RELEASES

There is no record of any spills from the unloading or warehouse operations [I-1, I-4; T-3]. Some chemical releases could have occurred because spills due to unloading operations are not uncommon. Any spill that was not cleaned up would most likely have drained to the Mississippi River or to the fill under the berths.

3.10 ASBESTOS

3.10.1 DESCRIPTION

Transite siding was tentatively identified on Buildings 623 and 624 (photos 9, 10). This material is known to contain asbestos fibers. None of the buildings, however, has been surveyed for asbestos.

3.10.2 KNOWN AND SUSPECTED RELEASES

There is no documentation of asbestos release. No damaged insulation was observed.

SECTION 4

HUMAN AND ENVIRONMENTAL RECEPTORS

The pathways by which human and environmental receptors may be exposed to site-related chemicals are discussed in this section.

4.1 GROUNDWATER

Infiltration and percolation to the groundwater is minimal because much of the property is paved. The groundwater in this area is brackish and unfit for consumption. Drinking water for the greater New Orleans area is obtained from the Mississippi River. If any contaminants were to penetrate the asphalt or concrete floors of the buildings through cracks, they could reach the groundwater 8 to 10 ft below. All registered wells within 3 miles are drilled to 700 to 800 ft, and it is anticipated that they would not be affected by the contaminants. The shallow groundwater would be expected to eventually discharge to the Mississippi. However, the concentrations would be expected to be quite dilute. There are no records of the shallow groundwater being used in this region. The effects on human and environmental receptors exposed to groundwater are anticipated to be minimal.

4.2 SURFACE WATER

Stormwater runoff is collected by stormwater sewers and is discharged to the city storm sewer system, which discharges to the Gulf Outlet Canal. No ongoing discharges or surface contamination was apparent during the site inspection; therefore, no impact on human and environmental receptors from surface water is expected. Any spills in the berths could drain directly to the Mississippi River, or to the fill land underneath the berths. Contaminants, if present in this sediment, could leach or be eroded into the Mississippi River. Any contaminants that would reach the river would be significantly diluted. Impact on aquatic life and waterbirds in the area is expected to be low.

4.3 AIR

No permanent sources of air contaminants are known to be present onsite. Therefore, no human or environmental receptors would be impacted by air contaminants at the site. However, the potential exists for exposure to asbestos from the siding in some of the buildings if it is removed or damaged.

4.4 SOILS

Because most of the site is paved with asphalt, little direct contact with contaminated surfaces is anticipated. An underground storage tank, which was replaced in 1982, was found to have leaked. The effect of this release to the environment is unknown. There is no evidence of leakage from

transformers or any other releases to the soil. Soil contamination from organics near the vehicle wash rack or the railroad tracks is possible, and could present a direct contact hazard to workers in these areas. A spill in one of the berths could drain to the fill land underneath.

4.5 OTHER HAZARDS

4.5.1 FIRE AND EXPLOSIONS

Transformers present a risk of fire and explosion. However, the risk of fire and explosion does not appear to be any greater than for transformers at other industrial sites. Once chemicals stored at the site are removed prior to property transfer, there would be no other known fire or explosion hazard present.

4.5.2 DIRECT CONTACT

The walls and floors of buildings that housed hazardous materials may have absorbed contaminants that could be contacted by personnel at a later time. Such buildings include Buildings 623, 624, and the five berths. Building surfaces, if contaminated, may provide a direct contact hazard to site personnel.

SECTION 5

CONCLUSIONS AND RECOMMENDATIONS

5.1 SUMMARY OF FINDINGS

New Orleans MOT is a large, urban warehouse and shipping operation located on the Mississippi River. The facility is located in a residential section of New Orleans. Construction of the facility began in 1917. Wetlands have been identified within one mile of the facility.

There are approximately 10 registered wells within 3 miles of the installation. None are used for drinking water. The aquifer used in this area is approximately 700 ft deep.

There are few operations that would adversely impact local human and environmental receptors. These are summarized in the following subsections.

5.1.1 UNDERGROUND STORAGE TANKS

Four existing and three potential underground storage tanks are present at the facility. Monitoring wells are to be installed by the end of 1989 around the four known underground storage tanks.

- Tank 601-1 - Diesel fuel.
- Tank 601-2 - Waste fuel (currently inactive).
- Tank 601-3 - Gasoline.
- Tank 623 - Recycled fuel from unloading operation.

A former pump station equipped with two underground storage tanks was also identified. These tanks are believed to be still present. During the survey, a number of 1/4-in. steel pipes that ran underground were found behind Building 623, which indicates a potential tank. These operations are mainly a threat to soil and shallow groundwater.

5.1.2 TRANSFORMERS

None of the transformers onsite appeared to be leaking. However, they have not been tested for PCBs. Ownership and operational responsibility was reported to be the NSA's. A potential release from one of the units in the berths would affect either the Mississippi River or the fill under the berths. A potential release from the station on the parking lot would likely seep into the ground through cracks in the asphalt and perhaps to the Gulf Outlet Canal through the storm sewer.

5.1.3 FUEL UNLOADING AREA

The fuel unloading operation takes place inside Building 623 over a concrete floor. Gasoline is pumped out of POVs prior to shipment. Past spills would

likely have reached the drains in the building, which discharge to the storm sewer.

5.1.4 VEHICLE WASH RACK

A concrete pad behind Building 623 was used to wash vehicles. Washwater can be expected to have seeped into the surrounding ground because there are no drains nearby. It appeared that the water would potentially drain from one corner of the pad to the ground.

5.1.5 RAILROAD TRACKS

Rail lines were used extensively to transport hazardous materials including ordnance and chemicals. Many of the tracks present in 1963 have either been removed or paved over. Potential past spills during loading operations would have affected the soil. More mobile contaminants could have migrated to the shallow groundwater.

5.1.6 BERTHS 1 TO 5

These warehouse facilities have been used to store chemicals and ordnance since at least World War II. At the time of the survey, compressed gases, corrosives, flammables, oxidizers, and ordnance were observed. Any potential spills would be expected to affect either the Mississippi River or the fill material under the berths.

5.1.7 ASBESTOS

Buildings 623 and 624 were tentatively identified as having Transite siding, a material known to contain asbestos. No damaged insulation was observed. An asbestos survey, however, has not been performed for these buildings nor the berths.

5.2 RECOMMENDATIONS FOR FURTHER ACTION

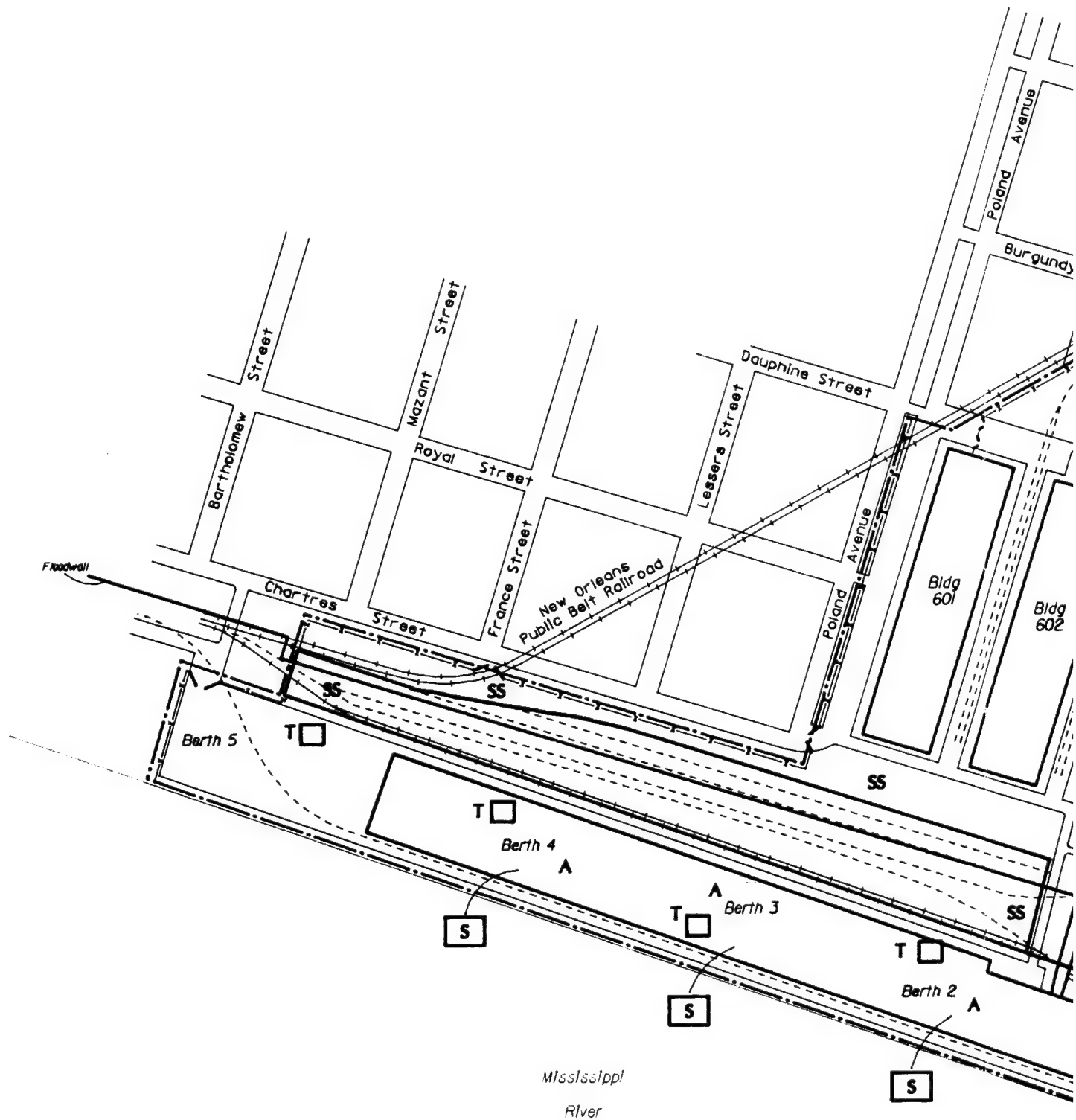
No conditions were observed on the property that appear to represent an immediate substantial threat to human health or the environment. The ESOs identified have the potential to affect human health or the environment. These recommendations are summarized in Table 5-1 and shown in Figure 5-1. Sampling and additional study is recommended as follows.

5.2.1 UNDERGROUND STORAGE TANKS

No further action is recommended because monitoring wells are planned for the tanks near Ramp 613 and the tank adjacent to Building 623. During the survey, the following areas were identified as potential locations for underground storage tanks: near the boat ramp and behind Building 623. A geophysical survey should be performed in these areas to confirm the presence of tanks.

Table 5-1
ESOs Identified at New Orleans MOT and Recommendations for Further Action

ESOs	Contaminants of Concern	Recommended Activity	Number of Samples	Location	Sample Type	Analysis
Underground Storage Tanks	Petroleum hydrocarbons	No further action	—	Next to Ramp 613	—	—
Underground Storage Tank	Petroleum hydrocarbons	No further action	—	In front of Building 623	—	—
Potential Underground Storage Tank	Petroleum hydrocarbons	Site Investigation		Next to boat ramp	Tank verification	
Potential Underground Storage Tank	Unknown	Site Investigation		Behind Building 623	Tank verification	
Transformers	PCBs	Site Investigation	1/transformer	Each transformer	Transformer oil	PCBs
Fuel Unloading Area	Petroleum hydrocarbons	Site Investigation	1	Floor drain	Drain sediments	TPH
Vehicle Wash Rack	Petroleum hydrocarbons	Site Investigation	2	Along drainage path	Soil	TPH and RCRA metals
Railroad Tracks	Creosote, ordnance, solvents, chemicals	Site Investigation	10 composite	Distributed through railway	Soil	TPH, pesticides, and BNAs
Berths 1 - 5	Ordnance, solvents, chemicals	Site Investigation	Approximately 15 composite	Sediments present under drains	Sediment	Priority pollutants
Asbestos	Asbestos	Site Investigation		Buildings 623 and 624 and Berths 1-4	Asbestos survey	Asbestos



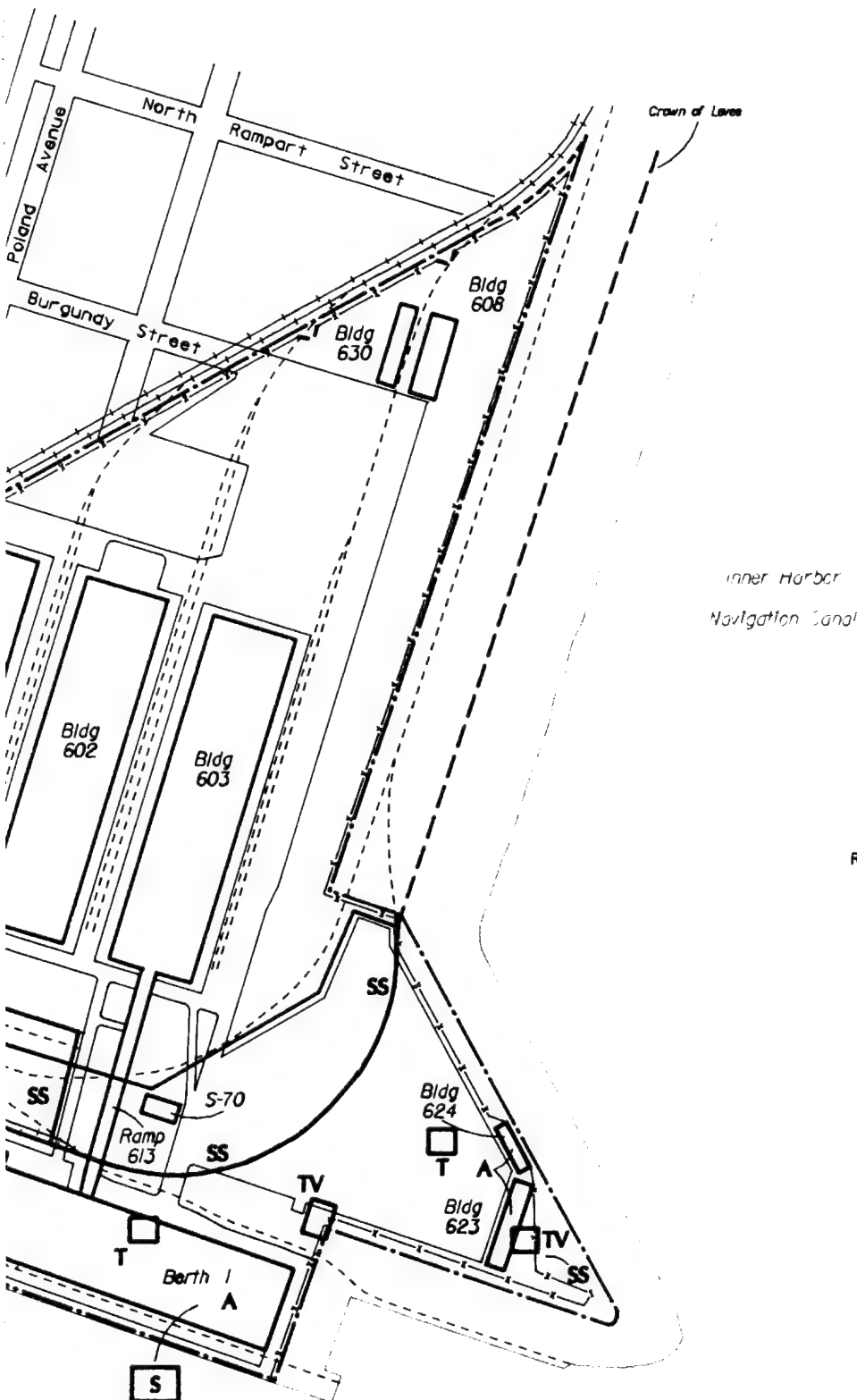
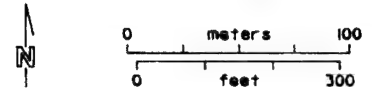
USATHAMA

U.S. Army Toxic and Hazardous Materials Agency

--- Former Railroad

Figure 5-1
Recommended Sampling
Locations

Compiled in 1989 from various sources
provided by the U.S. Army Toxic and
Hazardous Materials Agency



RECOMMENDED SAMPLING METHODS

- T** Transformer Oil
- SS** Surface Soil
- A** Asbestos
- TV** Tank Verification
- S** Sediment (Below Berths 1-4)

NOTE: Asbestos sampling is
recommended for all buildings.

5.2.2 TRANSFORMERS

A sample of dielectric fluid should be obtained from each transformer and analyzed for PCBs. Each unit should be labeled appropriately as a PCB, PCB-contaminated, or non-PCB transformer, depending on the individual analytical results.

5.2.3 FUEL UNLOADING AREA

A sediment sample in the bottom of the trench drain in the fuel unloading area should be sampled and analyzed for TPH. The drain is the most likely pathway for any fuel spills.

5.2.4 VEHICLE WASH RACK

Split-spoon soil samples taken at a depth of 18 in. should be collected at two locations along the drainage pathway from the concrete wash rack. Samples at each location should be analyzed for TPH and RCRA metals.

5.2.5 RAILROAD TRACKS

Most of the area is now paved. Forty 18-in. split-spoon soil samples should be collected below the asphalt surface. These samples should be distributed throughout the yard and along the single rail line that ran through the facility. These samples should be composited into groups of four and analyzed for TPH, pesticides and BNA compounds on the EPA's priority pollutants list. These compounds represent constituents that may be present from chemicals that may have been stored since World War II.

5.2.6 BERTHS 1-5

Sediments under each of the drains should be sampled. There are approximately 15; the exact number of drains is uncertain. Three 18-in. split-spoon samples should be collected from under each drain and composited. The composite samples should be analyzed for priority pollutants because of the uncertainty of the chemicals that may have been spilled since World War II.

5.2.7 ASBESTOS

Samples of the siding from Buildings 623 and 624 should be collected. Although no other material was identified, Buildings 623 and 624 and Berths 1 to 4 should be surveyed for asbestos.

SECTION 6

REFERENCES

6.1 DIRECT INTERVIEWS

- I-1 Chief, Office of Facilities Engineering
MTMC Gulf Outport
24 October 1989
- I-2 Civil Engineering Technician
MTMC Gulf Outport
24 October 1989
- I-3 Cargo Control Specialist
MTMC Gulf Outport
24 October 1989
- I-4 Stevedore, Ryan-Walsh, Inc.
24 October 1989

6.2 TELEPHONE INTERVIEWS

- T-1 Louisiana Department of Environmental Quality
14, 18, 19, 22, 27 September 1989
- T-2 New Orleans Water Department
27 October 1989, 3 November 1989

6.3 REPORTS AND OTHER DOCUMENTS

- R-1 Registered Wells in Orleans Parish, Louisiana Department of Transportation and Development.
- R-2 Ground Water for the Mississippi River Parishes in the Greater New Orleans Area, Louisiana - Water Resources Basic Records Report No. 11; United States Department of the Interior Geological Survey in Cooperation with Louisiana Department of Transportation and Development Office of Public Works, 1983.
- R-3 Ground Water Resources of the Greater New Orleans Area, Louisiana - Water Resources Bulletin No.9, Department of Conservation Louisiana Geological Survey and the Louisiana Department of Public Works; 1966.
- R-4 Settlement Study 1972, Condensed Version.
- R-5 Louisiana Tank Project Contract No. N62467-87-C-0264, Engineering, Design and Geosciences Group, Inc. 1978.



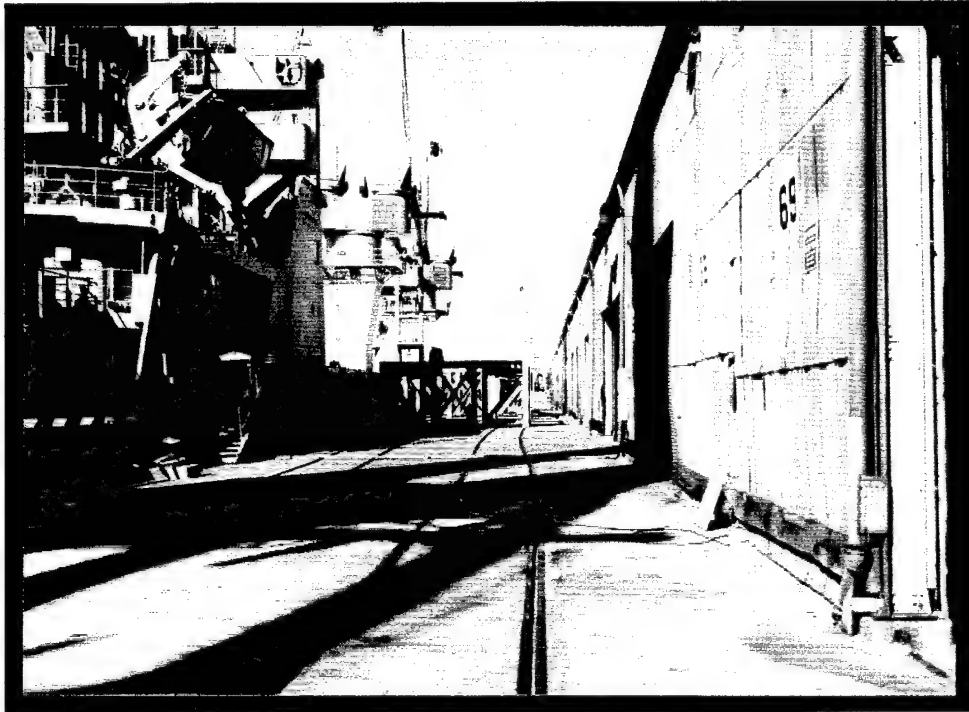
- R-6 Preliminary Report of Excess at New Orleans Army Base, U.S. Army Corps of Engineers - Fort Worth District, 1989.
- R-7 Installation Assessment Army Base Closure Program, New Orleans Military Ocean Terminal, New Orleans, Louisiana, the Bionetics Corporation, 1989.
- R-8 Water Management Division, U.S. Environmental Protection Agency, Region VI, 3 October 1989 letter to Roy F. Weston, Inc.
- R-9 U.S. Environmental Protection Agency, Region VI, 4 October 1989 letter to Roy F. Weston, Inc.
- R-10 Climate of the States 2, Western States, Water Information Center, Inc. Port Washington, NY, 1974.
- R-11 1988 Local Climatological Data, Annual Summary with Comparative Data, New Orleans, Louisiana, National Oceanic and Atmospheric Administration, Asheville, NC.
- R-12 Flood Insurance Rate Map, City of New Orleans, Orleans Parish, Federal Emergency Management Agency.



SECTION 7

PHOTOGRAPHS

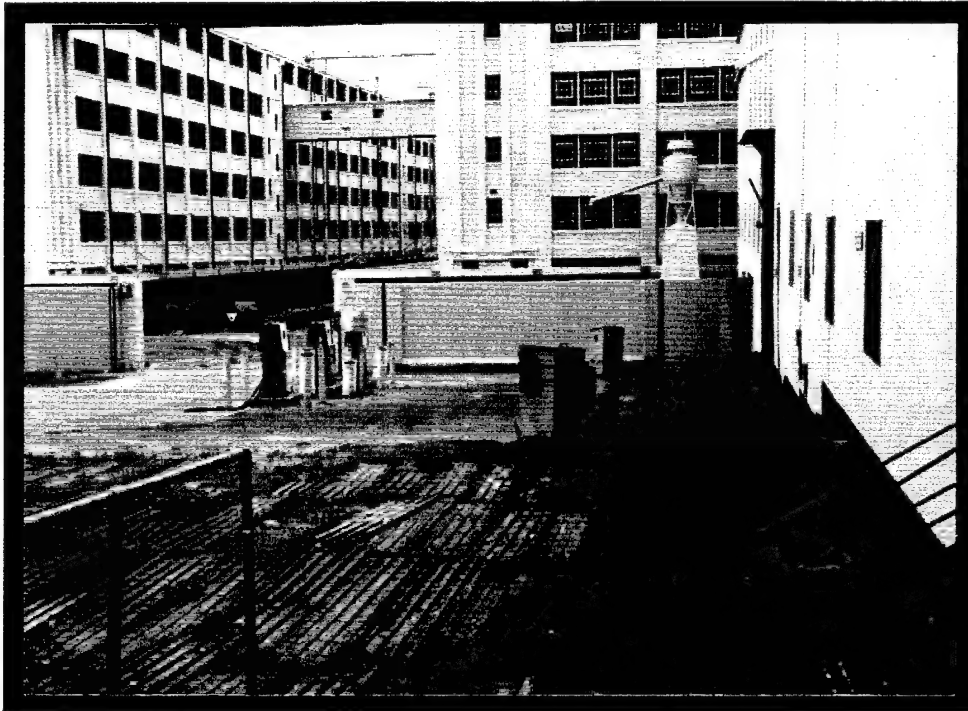
Photographs of ESOs taken during WESTON's site visit are included in this section.



1. BERTHS 1 TO 4 - RIVER SIDE



2. BERTHS 1 TO 4 - LAND SIDE



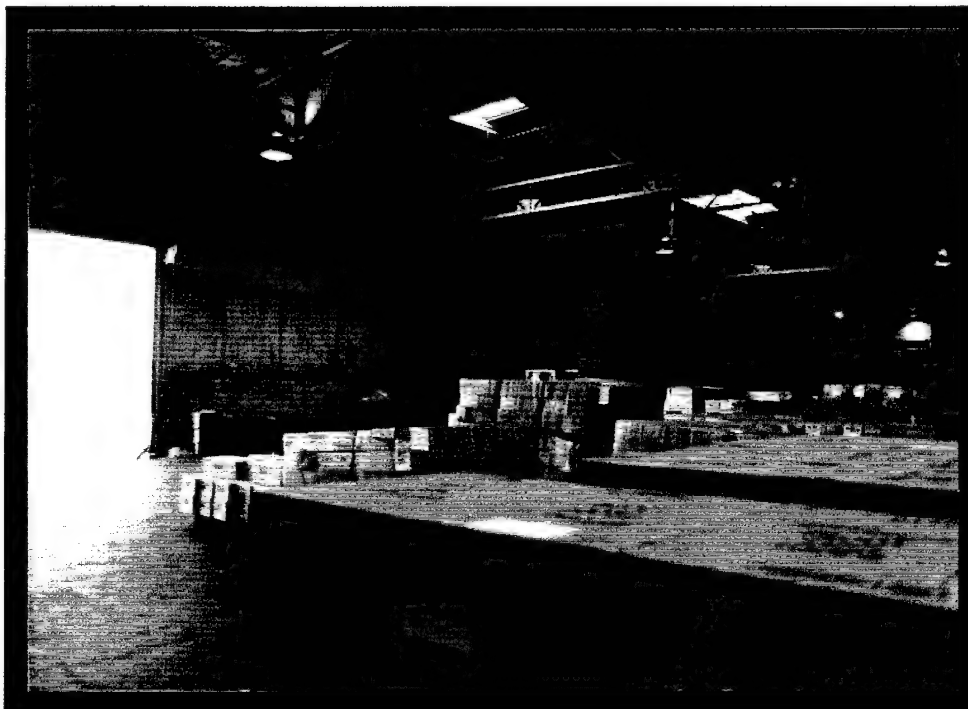
3. UNDERGROUND STORAGE TANKS (RAMP 613)



4. TRANSFORMER STATION



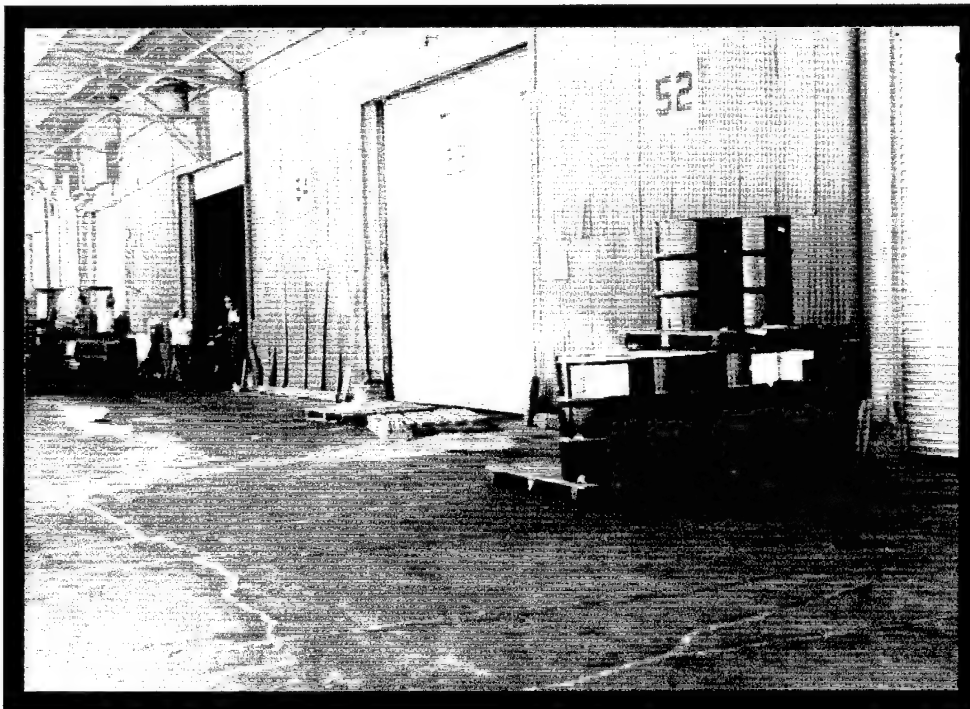
5. FUEL UNLOADING AREA - BUILDING 623



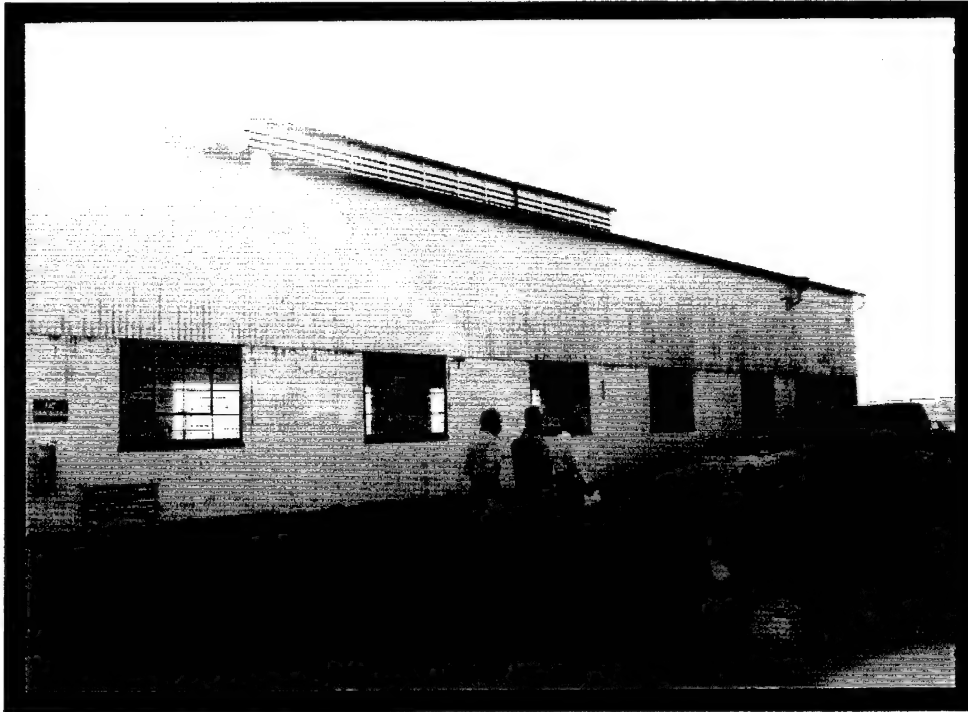
6. MATERIAL STORAGE - BERTH 1



7. MATERIAL STORAGE - BERTH 1



8. OUTSIDE STORAGE - BERTH 1



9. BUILDING 623



10. BUILDING 624

APPENDIX A

**SUMMARY OF OPERATIONS
(EXCERPTS)**

III. current mission and operations

A-1



general

Gulf Outport has the general mission of planning for and accomplishing the expeditious movement of Government-sponsored cargo in the New Orleans/Gulf coast area. As directed by HQ MTMCEA, Gulf Outport must:

1. Receive, stage, and move all export and import shipments transiting the outport.
2. Operate a container freight station.
3. Monitor and document all DOD shipments transiting through the Port of New Orleans.
4. Pack and crate shipments for the outport and other agencies, as necessary.

III-1

5. Provide cargo security for Gulf Outport.

6. Command troops assigned to the outport.

Within the scope of the Gulf Outport mission are three operational areas: container stuffing, port operations (breakbulk and barge), and personal property shipment. Included in the personal property shipment is the receiving and shipping of privately owned vehicles (POVs), as well as the shipping and storage of household goods (HHG).

Since 1973, a general reconfiguration of the cargo operations area has taken place. The cargo operations areas, both import and export, are roughly bounded by Third Street southward to the water and A Street eastward to the levee. The POV processing and storage area is located in the southeastern corner of the outport and in the first four rows of the parking lot north of Building 601 and west of A Street. Household goods are stored mainly on the first floor of Building 601 and in the transit shed. Most administrative offices are located in either Building 601 (second floor) or the transit shed.

Gulf Outport is considered to be a major tenant of the Navy because it leases, from the Navy, all of its administrative and covered storage space, with the exception of the transit shed and wharf. Other major tenants in the terminal are: the Coast Guard, Military Sealift Command (MSC), Navy Public Works Center, and 4th Marine Air Wing (MAW). The New Orleans Dock Board leases part of the transit shed (sections 4 and 5) (see fig I-2) and the open wharf area from Gulf Outport.

port operations

general

Port operations at Gulf Outport include loading, unloading, and staging of breakbulk and barge cargo, and stuffing and unstuffing of containers. These activities are controlled by the Cargo Operations Division control center, located in Building 601. Gulf Outport currently handles about 44,650 MTON of breakbulk and barge cargo per month and 9,713 MTON of containerized cargo per month (based on FY 78 through FY 80 figures). Under present workloads, existing berth space is adequately used.

Cargo enters Gulf Outport by rail and truck. Inbound tractor-trailers/containers receive their documentation at the contractor-operated truck control center at the northeastern corner of Building 601, as shown on the flow chart (fig II-4). From the truck control center, the driver is directed to an unloading dock along the east side of Building 601 or to the wharf transit-shed receiving area on the city side of section 1.

When possible, cargo receiving and staging in the warehouses are performed concurrently. Once a truck is spotted, it is completely unloaded at that site. As cargo is taken off the truck, it is sorted and moved to a staging area designated for a specific destination or type of cargo. Transferring cargo between warehouses is kept to a minimum, and when required, it is done by contractor personnel using forklifts and dock trailers.

breakbulk

Table III-1 shows a commodity profile of breakbulk and containerized cargo handled at Gulf Outport over the last 9 years. General cargo and POVs comprise the majority of cargo at Gulf Outport. The breakbulk workload has taken a downward trend over the last 3 years. Table III-1 shows this trend and the breakout for import and export tonnages. Total breakbulk workload, at present, averages about 44,650 MTON per month.

Most of the breakbulk operations take place in Building 630 and parts of the first floor of Building 601. A layout of the first floor of Building 601 is shown in figure III-1. Other warehouses are used to store cargo that requires special facilities, such as the first floor of Building 602 for POVs requiring special security and Building 608 for hazardous cargo. A walk-through inspection of all warehouses revealed efficient storage of cargo, with a high degree of floor space utilization, averaging about 75 percent. Both of the primary warehouses are parallel to usable rail lines and have loading ramps along their sides to aid in offloading trucks.

Import cargo generally is placed on the city side of Building 630, where it awaits pickup by commercial carrier. Building 630 has a truck-trailer loading ramp running the length of section 1 westward to the elevated ramp between Buildings 601 and 630 (fig III-2).

container stuffing/unstuffing

Based on statistics for FY 78 through FY 80, about 18 percent of the cargo is containerized. At present, this amounts to 9,700 MTON a month. Most of the containerized cargo is bound for the Canal Zone, Europe, the Far East, and the Mediterranean. Currently, the breakdown of container stuffing/unstuffing operations is 81 percent general cargo (73 percent in container vans and 8 percent in MILVANS) and 19 percent POVs (in container vans). At times reefer cargo transits the outport; however, this is extremely rare and involves less than 1 percent of container operations.

The first floor of Building 601 is the primary container-stuffing warehouse at Gulf Outport. The east side of Building 601 is where most container operations take place; however, other ramps are available between Buildings 601 and 602, if needed (figs III-3 and III-4). A layout of the container-stuffing warehouse is illustrated in figure III-5. As can be seen, this building is well suited for stuffing operations, with loading docks running the full length of its east and west faces. This building is also accessible by rail on the west side. The rail line to the east side of the building is unusable because parts of it have been paved over in the POV open-storage lot.

TABLE III-1
BREAKBULK AND CONTAINER COMMODITY PROFILE, FY 1972 THROUGH, FY 1980

Comm Code	Export and Import Workload (MTON)												
	FY 72	FY 73	FY 74	FY 75	FY 76	FY 77	FY 78	FY 79	FY 80				
10 Aircraft, Unboxed	40	1,200	136	-	32	-	-	1,311	-				
20 Explosives	-	-	-	5	-	-	-	-	-				
25 MILVANS - Explosives	-	-	-	-	-	-	-	-	-				
30 Bulk	-	-	-	-	-	-	-	-	-				
40 General	370,346	286,055	209,360	155,085	114,350	28,412	114,869	107,783	90,308	66,031			
41 Lumber, Lots, etc.	10,588	7,249	6,236	9,819	5,702	1,440	9,674	7,587	9,666	8,898			
43 Unboxed Metal Products	33,894	17,678	6,213	3,304	5,154	1,094	1,805	2,172	2,075	2,078			
44 CONEX	95,790	71,164	32,554	36,334	23,281	11,938	8,115	4,844	3,165	1,874			
45 MILVANS - Other	3,015	3,708	8,839	11,914	5,472	608	5,825	20,102	11,040	6,304			
47 Household Goods and Bag	99,797	49,967	29,822	56,131	28,167	3,168	43,327	150,632	56,846	54,283			
50 Reefer	25,460	28,488	24,704	23,976	22,569	5,274	21,942	19,760	16,400	10,143			
60 Unboxed Vehicles - Heavy	73,654	109,540	80,494	56,281	52,832	5,278	69,535	39,750	32,303	29,766			
61 Unboxed Vehicles - Light	34,905	25,473	22,179	21,963	35,829	3,474	17,514	17,863	23,468	17,152			
62 Unboxed POVS	69,197	77,949	65,308	65,322	68,425	22,471	76,439	64,599	70,967	64,286			
63 RORO Trailers	131	77	72	145	70	-	-	-	-	-			
73 Commercial Vans	157,177	185,353	180,849	193,655	160,072	41,280	138,015	185,608	191,619	167,359			
-- Berth - Aircraft	-	58	142	-	-	-	-	-	-	-			
-- Berth - Other	8,780	24,868	8,601	7,909	4,986	1,113	13,600	-	2,066	7,613			
-- Berth - Vehicles/MILVANS	19,726	18,872	18,653	10,952	9,696	3,626	6,917	-	15,014	25,052			
Total Breakbulk Cargo	1,002,500	907,699	694,162	652,795	536,637	129,176	527,577	620,302	526,248	460,839			
71 Stuff/Unstuff - CONEX	1,908	1,284	1,591	1,614	1,130	182	835	670	495	332			
75 Triwall/Palletize - Other	776	97	2,017	237	16	-	-	3	-	-			
76 Triwall/Palletize - Expl	-	-	-	-	-	-	-	-	-	-			
77 Stuff/Unstuff C/V - Other	257,169	112,981	133,973	139,863	86,452	20,802	83,601	89,875	87,950	76,179			
78 Stuff/Unstuff RORO	-	-	-	-	-	-	-	-	-	-			
79 Stuff/Unstuff C/V - Veh	89	7,138	14,484	17,325	12,208	4,710	17,317	17,152	26,229	23,969			
82 Mini Bridge	-	-	-	2,895	4,060	-	10,351	2,373	1,651	-			
83 Illustrated	-	-	-	-	-	-	-	-	-	-			
85 Stuff/Unstuff M/V - Other	182	-	-	-	-	-	-	4,791	7,844	10,094			
87 Stuff/Unstuff C/V - Reefer	-	-	-	-	-	-	-	-	-	72			
Total Containerized Cargo	260,124	121,500	152,065	161,934	103,866	25,694	112,107	114,854	124,169	110,646			
Total	1,262,624	1,029,199	846,227	819,729	640,503	154,870	639,684	735,156	650,417	571,485			

III-4

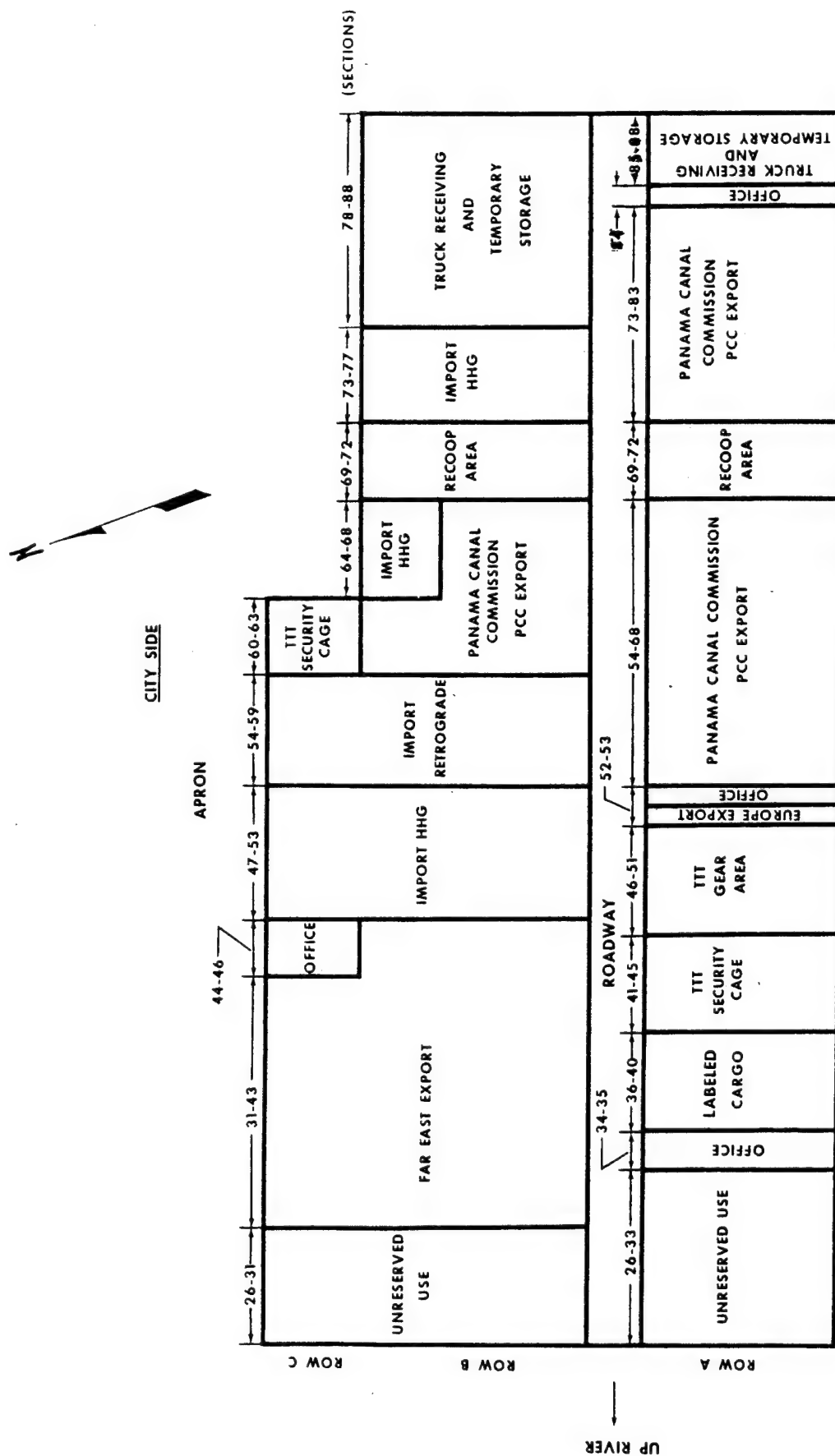


Figure III-1. Floor layout of Building 601, 1st floor.

roll-on/roll-off (RORO)

RORO operations are infeasible at Gulf Outport because of excessive tidal variations and the lack of available open-storage area. The nearest accessible RORO facilities are at the France Roads Terminal, located on the Inner Harbor Navigation Canal, north of Gulf Outport. This facility has one stern-loading RORO knuckle, with access from the north and south sides; therefore, it can handle two RORO ships at once. The south side of the knuckle can accommodate any RORO ship in existence today. The north side of the knuckle is very low to the water and can accommodate only smaller size RORO vessels (300 to 400 feet long), which could tie up to mooring clusters. This facility is illustrated in figures III-6 and III-7.

personal property

Personal property operations at Gulf Outport are divided into POV and household goods categories. These operations fall under the direction of the Cargo Operations Division.

privately owned vehicles. POVs are handled in either breakbulk or container operations. The following matrix provides condensed information in MTON of POVs processed through Gulf Outport in FY 79 and FY 80:

Year	Breakbulk	Container	Total
FY 79	70,967	26,229	97,196
FY 80	64,286	23,969	88,255

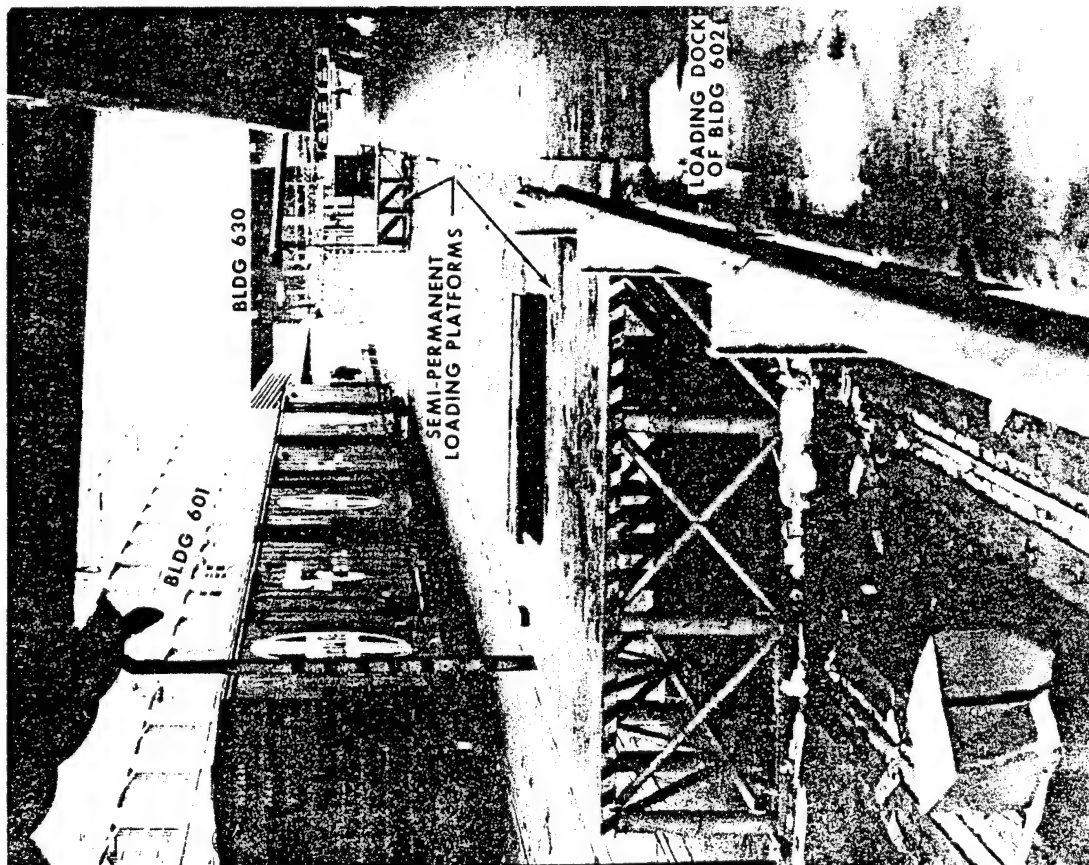


Figure III-4. Loading platforms on east side of Building 602 (southward view).

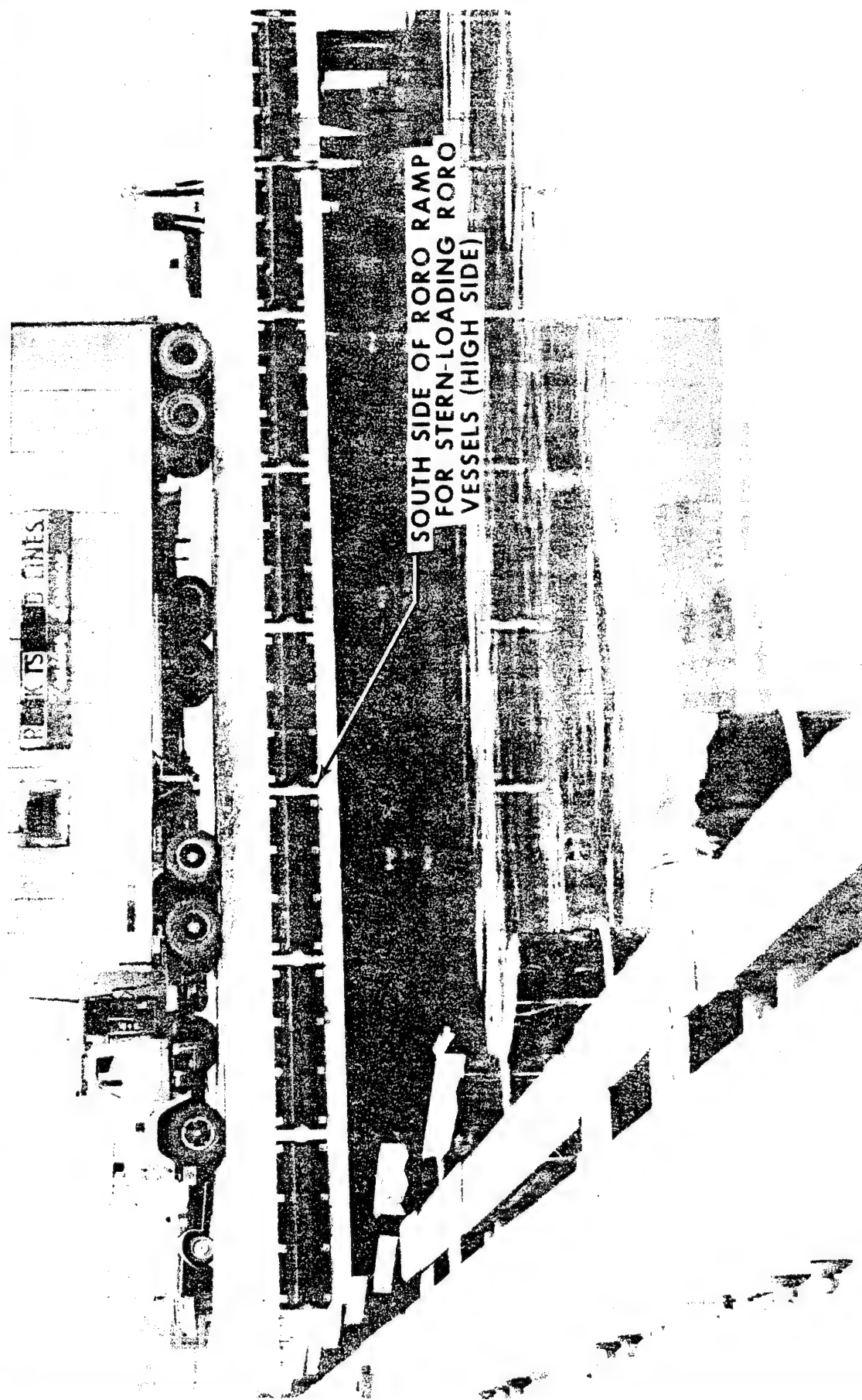


Figure 10. RORO berth at France Roads Terminal (northward view).

III-10

As can be seen, breakbulk handling of POVs is considerably higher than containerization.

When personnel turn in POVs for shipment overseas, they report to the POV processing office on the first floor of Building 601, adjacent to Second Street. Vehicles are inspected, for preshipment condition, in front of Building 601. During inclement weather, vehicles are inspected on the loading dock on the west side of Building 601. Currently, Gulf Outport has no covered inspection station for POV operations. After inspection, POVs to be shipped overseas are moved to the staging area adjacent to Building 623. Prior to shipment, they are moved through the processing line (Building 623), where the fuel is drained, batteries are disconnected, and pilferable items are removed (fig III-8). The POVs are then staged, by destination, for export (fig III-9). POVs exported by containers are stuffed into containers at the loading dock area on the city side of Building 630. When more stuffing positions are needed, the loading dock areas at Buildings 601 (west side) and 602 (east side) can be used.

Import POV operations are the reverse of export operations. When Gulf Outport is notified by a customer that he/she will be arriving to pick up his/her POV, 1 or 2 days prior to pickup, the POV is moved to the overflow staging lot north of Building 601.

Export POV shipments have been gradually declining over the past several years, while import shipments are up. This is clearly shown in table III-2, which lists shipments handled at Gulf Outport for 1978 through 1980. The yearly peak is seen to occur in

the July to November time frame. During these peak months, the overflow staging area north of Building 601 is usually needed.

At times, POVs are shipped by rail to Gulf Outport. These POVs usually arrive on multilevel railcars and are unloaded on the western side of Building 601. Most POVs arriving this way are imports from Hawaii, which are offloaded on the west coast and then shipped by rail to Gulf Outport. A listing of POV rail shipments to Gulf Outport is shown in table III-3. As can be seen, the peak influx is again during the summer months, with 63 percent arriving from May through September.

household goods. HHG moved through Gulf Outport make up about 12 percent of all breakbulk cargo handled. HHG are staged according to their point of destination (POD), loaded, and exported with other compatible cargo. Export HHG are essentially treated the same as any other breakbulk cargo.

Import HHG are unloaded from a vessel and stored in sections 47 to 53, 64 to 68, and 73 to 77 of Building 630. Storage-in-transit (SIT) HHG taken out of containers are staged on the first floor of Building 602, where they await loading and pickup by commercial carrier. Prior to loading, the Freight Traffic Division, which maintains overall control of import HHG, prepares Government bills of lading for each shipment, to be given to the carrier at the time of pickup. HHG for long-term storage (nontemp) are not stored at Gulf Outport, they are turned over to the Navy for storage.

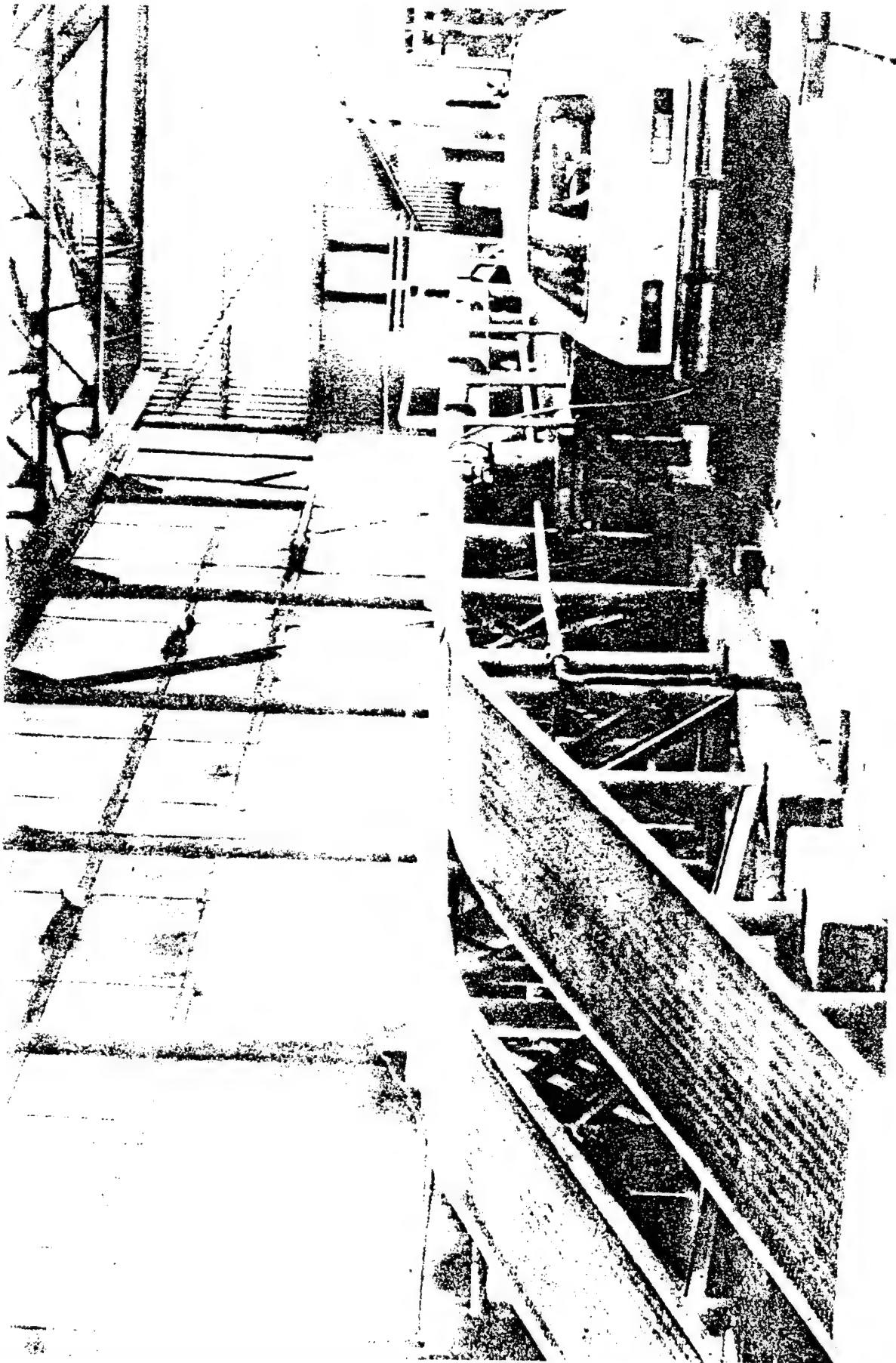


Figure III-8. Processing line for POV cargo operations (Building 623).

III-13

TABLE III-2
PRIVATELY OWNED VEHICLES HANDLED AT GULF OUTPORT*

Month	Export			Import		
	1978	1979	1980	1978	1979	1980
January	247	494	307	264	284	341
February	236	281	270	318	247	268
March	268	346	317	289	305	346
April	304	322	341	252	303	297
May	413	494	415	284	274	326
June	480	616	433	338	498	472
July	572	586	435	350	529	627
August	631	597	412	504	689	515
September	434	312	285	364	398	514
October	361	316	261	408	456	549
November	363	294	255	337	343	377
December	425	308	292	370	372	390
Total	4,736	4,966	4,023	4,078	4,698	5,022

*Includes both breakbulk and containerized POVs.

Except for FY 78, the movement of HHG through Gulf Outport has remained relatively constant over the last 4 years. A listing of recent shipments of HHG moved through the terminal is shown in table III-4.

TABLE III-3
POV SHIPMENTS ARRIVING BY RAIL IN 1980

Month	Number of Shipments	Number of Railcars	Number of POVs	Percent of Total Number of POVs
January	0	0	0	0
February	0	0	0	0
March	3	5	67	13.7
April	2	2	27	5.5
May	2	4	63	12.9
June	2	6	64	13.1
July	5	5	73	15.0
August	2	2	29	5.9
September	3	8	78	16.0
October	1	2	20	4.1
November	2	3	33	6.8
December	2	3	34	7.0
Total	24	40	488	100.0

TABLE III-4
HOUSEHOLD GOODS MOVED THROUGH GULF OUTPORT
DURING FISCAL YEAR 1980

FY 80	Number of Shipments		
	Export	Import	Total
October	642	1,572	2,214
November	331	886	1,217
December	301	748	1,049
January	256	937	1,193
February	285	514	799
March	267	880	1,147
April	246	708	954
May	232	352	584
June	225	922	1,147
July	230	1,484	1,714
August	440	1,140	1,580
September	<u>192</u>	<u>697</u>	<u>889</u>
Total	3,647	10,840	14,487

MILITARY TRAFFIC MANAGEMENT COMMAND GULF OUTPORT
4400 DAUPHINE STREET
NEW ORLEANS, LOUISIANA 70146-6000



STAFF DIRECTORY
 AREA CODE (504) 948-XXXX
 AUTOVON 363 XXXX
 OPERATOR ASSISTANCE 363-5011

COMMANDER
 MTEA-GUL-C
 LTC PATRICK A. PARKER 5190

DEPUTY COMMANDER
 MTEA-GUL-DC
 LCDR DONALD M. GIORDANO, SC, USN 5181

SUPPORT STAFF

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 MTEA-GUL-AD

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BUDGET ANALYST MS. CAROLYN V. PORTER 1207 AD(F)

PROGRAM ANALYST MR. IRVIN SMITH 6359 AD(P)

PERSONNEL LIAISON/PA REP. MS. LYNDIA P. BLAIR 6360 AD(S)

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SUPPLY OFFICER MS. DIANA B. WEST 5338

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CONTRACT ADMINISTRATOR MS. KATHLEEN R. DORAN 5292

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OFFICE OF FACILITY ENGINEER
 MTEA-GUL-EN

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MOTOR VEHICLE OPERATOR MR. JOHNNY JACKSON 5791

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SAFETY & OCCUPATIONAL HEALTH SPECIALIST MR. GEORGE H. STRUNK 6364

TRAINING NCO SGT(P) ANETONE U. SIMANU 6366

MILITARY POLICE INVESTIGATOR SGT JIMMIE ATKINSON 1654

SECURITY CONTRACT SERVICE REP MR. JAMES AVERY 1654

STAFF

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 MTEA-GUL-OP

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CARGO CONTROL MR. DAVID WARREN 1116

OPERATIONS NCO SFC TERRY MOORE 1124

WINSITE OP (WIN) 6150

MS. KATHLEEN G. BALLON (ALT) 1038

TRAFFIC MANAGEMENT DIVISION
 MTEA-GUL-TM

CHIEF MR. WESTLEY A. JACOMINO, JR. 1126

IMPORT/EXPORT MS. OLA MAE VIRGA TM(DT) 1130

QUALITY ASSURANCE TM(QS) 5210

CONTRACTOR PAYMENT MS. JANE ORLOPP 1001

PERSONAL PROPERTY TM(PE) 5229

POV MS. SHERYL VAN SYCOC 1218

EQUIPMENT INSPECTOR MR. MARCUS MILLER 1744

SUBORDINATE

BEAUMONT DETACHMENT
 MTEA-GUL-B

COMMANDER MS. ROBIN MILLER

TRANSPORTATION SPECIALIST MR. KENNETH J. PENDERGRAFT

AUTOVON 863-7210

COM # (409) 835-5471

DEX # (409) 835-5586

1255 MAIN ST
 BEAUMONT, TX 77701

SECURITY DIVISION
 BEAUMONT, TX 77704-4043

MOBILE DETACHMENT
 MTEA-GUL-M

COMMANDER CPT DANIEL V. SULK

MARINE CARGO SPECIALIST MR. FABIAN HOBBS

AUTOVON 436-3830

COM # (205) 438-6880

DEX # (205) 432-4005

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 PIER C NORTH
 ALABAMA STATE DOCKS
 MOBILE, AL 36601

ICORRESPONDENCE
 MOBILE, AL 36652-2725

GRANITE CITY POV PROCESSING CENTER
 MTEA-GUL-GC

COMMANDER CAPT LLOYD N. SOTTERS

TRANSPORTATION SPECIALIST MS. JANIS L. GUFFEY

MOVEMENT SPECIALIST SSG JOHN LEONARD

AUTOVON 892-4606/4616

COM # (618) 452-4650/4651

DEX # 892-4654

CHARLES MELVIN PRICE SUPPORT CENTER
 BUILDING 400
 GRANITE CITY, IL 62040-1801

FREQUENTLY USED NUMBERS

FACSIMILE (DEX) MACHINES
 MTEA-GUL-TM 948-5258
 MTEA-GUL-OP 948-5743
 MTEA-GUL-C 942-6902

GUARD OFFICE (AFTER DUTY HOURS) 948-5188

STAFF DUTY OFFICER (PAGING SERVICE) 531-0236 or 581-0250

AIR FORCE WATERPORT LOGISTICS OFFICE (WPLO) 948-5283

EMERGENCY OPERATIONS CENTER (EOC) 948-1111

SECURE TELEPHONE UNIT (STU II) ID# 06052 942-6770

MESSAGE RECEIVING RECORDER (NON DUTY HRS/WEEKENDS/HOLIDAYS) 948-1895

TERMINAL SERVICES CONTRACTOR
 RYAN-WALSH STEVEDORING CO., INC.

TERMINAL MANAGER MR. THOMAS ARATA 948-1632

ASSISTANT TERMINAL MANAGER MR. DIAGO DUQUE 948-5127

ASSISTANT ADMINISTRATOR MR. J.P. WRIGHT 948-1359

8 SEPTEMBER 1989
 THIS IS NOT AN OFFICIAL ORGANIZATIONAL CHART
 PUBLISHED BY MTEA GUL AD(S)

APPENDIX B

NOTIFICATION OF HAZARDOUS WASTE ACTIVITY



INSTRUCTIONS: If you received a preprinted label, affix it in the space at left. If any of the information on the label is incorrect, draw a line through it and supply the correct information in the appropriate section below. If the label is complete and correct, leave Items I, II, and III below blank. If you did not receive a preprinted label, complete all items. "Installation" means a single site where hazardous waste is generated, treated, stored and/or disposed of, or a transporter's principal place of business. Please refer to the **INSTRUCTIONS FOR FILING NOTIFICATION** before completing this form. The information requested herein is required by law (*Section 3010 of the Resource Conservation and Recovery Act*).

I. INSTALLATION'S EPA I.D. NO.	GSA: LA-2135-99314	
II. NAME OF INSTALLATION	NAME: PRESS HARD WHEN FILLING IN NAME & ADDRESS. MTMC Gulf Outport Facilities Division	HERE
III. INSTALLATION MAILING ADDRESS	STREET ADDRESS: 4400 Dauphine Street	
IV. LOCATION OF INSTALLATION	CITY, STATE, & ZIP CODE: New Orleans, Louisiana 70146	

FOR OFFICIAL USE ONLY

[illegible]

INSTALLATION'S EPA I.D. NUMBER													APPROVED		DATE RECEIVED (yr., mo., & day)			
3	F L A 5 2 1 3 5 9 9 3 1 4 2 1											T A C						
1	2											13	14	15	16	17	22	

I. NAME OF INSTALLATION

[illegible]

II. INSTALLATION MAILING ADDRESS

[illegible]

CITY OR TOWN															ST.	ZIP CODE						
C	4	N	e	w	O	r	l	e	a	n	s					L	A	7	0	1	4	6
15	16															40	41	42	47			51

III. LOCATION OF INSTALLATION

STREET OR ROUTE NUMBER																			
C																			
5	4	4	0	0	D	a	u	p	h	i	n	e	S	t	r	e	e	t	

CITY OR TOWN															ST.	ZIP CODE	81010171218				
C															LA	70145	59	64			
6	N	e	w	O	r	l	e	a	n	s						40	41	42	47	-	31

IV. INSTALLATION CONTACT

NAME AND TITLE (last, first, & job title)															PHONE NO. (area code & no.)																							
C																																						
2	J	o	n	e	s	P	a	u	l	F	a	c	i	l	i	t	i	e	s	M	a	n	a	g	e	r	5	0	4	-	9	4	8	-	1	3	0	1
15	16																									45	46	-	48		49	-	51		52	-	55	

V. OWNERSHIP

A. NAME OF INSTALLATION'S LEGAL OWNER																								
C																								
8	U	S		A	R	M	Y																	
15	16																				35			

6

 21

B. TYPE OF OWNERSHIP
(enter the appropriate letter into box)

F = FEDERAL M = NON-FEDERAL	F
--------------------------------	---

VI. TYPE OF HAZARDOUS WASTE ACTIVITY (enter "X" in the appropriate box(es))

☐ 87 A. GENERATION

☐ 88 B. TRANSPORTATION (complete item VII)

☐ 89 C. TREAT/STORE/DISPOSE

☐ 90 D. UNDERGROUND INJECTION

DOES NOT APPLY

VII. MODE OF TRANSPORTATION (*transporters only – enter “X” in the appropriate box(es)*)

☐ 61 A. AIR ☐ 62 B. RAIL ☒ 63 C. HIGHWAY ☐ 64 D. WATER ☐ 65 E. OTHER (specify):

VIII. FIRST OR SUBSEQUENT NOTIFICATION

Mark "X" in the appropriate box to indicate whether this is your installation's first notification of hazardous waste activity or a subsequent notification. If this is not your first notification, enter your Installation's EPA I.D. Number in the space provided below.

☐ A. FIRST NOTIFICATION ☐ B. SUBSEQUENT NOTIFICATION (complete item C)

IX. DESCRIPTION OF HAZARDOUS WASTES

Please go to the reverse of this form and provide the requested information.

IX. DESCRIPTION OF HAZARDOUS WASTES (continued from front)

A. HAZARDOUS WASTES FROM NON-SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.31 for each listed hazardous waste from non-specific sources your installation handles. Use additional sheets if necessary.

1	2	3	4	5	6
23 - 26	23 - 26	23 - 26	23 - 26	23 - 26	23 - 26
7	8	9	10	11	12
23 - 26	23 - 26	23 - 26	23 - 26	23 - 26	23 - 26

B. HAZARDOUS WASTES FROM SPECIFIC SOURCES. Enter the four-digit number from 40 CFR Part 261.32 for each listed hazardous waste from specific industrial sources your installation handles. Use additional sheets if necessary.

13	14	15	16	17	18
23 - 26	23 - 26	23 - 26	23 - 26	23 - 26	23 - 26
19	20	21	22	23	24
23 - 26	23 - 26	23 - 26	23 - 26	23 - 26	23 - 26
25	26	27	28	29	30
23 - 26	23 - 26	23 - 26	23 - 26	23 - 26	23 - 26

C. COMMERCIAL CHEMICAL PRODUCT HAZARDOUS WASTES. Enter the four-digit number from 40 CFR Part 261.33 for each chemical substance your installation handles which may be a hazardous waste. Use additional sheets if necessary.

31	32	33	34	35	36
23 - 26	23 - 26	23 - 26	23 - 26	23 - 26	23 - 26
37	38	39	40	41	42
23 - 26	23 - 26	23 - 26	23 - 26	23 - 26	23 - 26
43	44	45	46	47	48
23 - 26	23 - 26	23 - 26	23 - 26	23 - 26	23 - 26

D. LISTED INFECTIOUS WASTES. Enter the four-digit number from 40 CFR Part 261.34 for each listed hazardous waste from hospitals, veterinary hospitals, medical and research laboratories your installation handles. Use additional sheets if necessary.

49	50	51	52	53	54
23 - 26	23 - 26	23 - 26	23 - 26	23 - 26	23 - 26

E. CHARACTERISTICS OF NON-LISTED HAZARDOUS WASTES. Mark "X" in the boxes corresponding to the characteristics of non-listed hazardous wastes your installation handles. (See 40 CFR Parts 261.21 - 261.24.)

☐ 1. IGNITABLE (D001)


☐ 2. CORROSIVE (D002)

☐ 3. REACTIVE (D003)

☐ 4. TOXIC (D000)

X. CERTIFICATION

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.

SIGNATURE	NAME & OFFICIAL TITLE (type or print)	DATE SIGNED
	PAUL R. JONES, FACILITIES MANAGER	23 July 1980

EPA Form 8700-12 (6-80) REVERSE

Not required primary notification because hazardous wastes are not generated or transported by this organization.



ACKNOWLEDGEMENT OF NOTIFICATION
OF HAZARDOUS WASTE ACTIVITY
(VERIFICATION)

This is to acknowledge that you have filed a Notification of Hazardous Waste Activity for the installation located at the address shown in the box below to comply with Section 3010 of the Resource Conservation and Recovery Act (RCRA). Your EPA Identification Number for that installation appears in the box below. The EPA Identification Number must be included on all shipping manifests for transporting hazardous wastes; on all Annual Reports that generators of hazardous waste, and owners and operators of hazardous waste treatment, storage and disposal facilities must file with EPA; on all applications for a Federal Hazardous Waste Permit; and other hazardous waste management reports and documents required under Subtitle C of RCRA.

EPA I.D. NUMBER

LA5-21-359-9314

INSTALLATION ADDRESS

U.S. ARMY MTMC GULF OUTPORT
4400 DAUPHINE STREET
NEW ORLEANS, LOUISIANA 70146

4400 DAUPHINE STREET
NEW ORLEANS, LOUISIANA 70146

EPA Form 8700-12B (4-80)

APPENDIX C

**REGISTRATION FOR UNDERGROUND STORAGE TANKS
NEW ORLEANS MOT**

- REGISTRATION FOR UNDERGROUND STORAGE TANKS

STATE OF LOUISIANA
DEPARTMENT OF ENVIRONMENTAL QUALITY
OFFICE OF SOLID AND HAZARDOUS WASTE
UNDERGROUND STORAGE TANK PROGRAM
P.O. BOX 44274 BATON ROUGE, LA 70804-4274

RECEIVED BY STATE USE ONLY 180900
I.D. NUMBER 36 086015
APR 23 1986 DATE RECEIVED 4/23/86
DATE CHECKED 8-5-86
PROTECTION DIVISION DIVISIONED BY 4/13

GENERAL INFORMATION

Registration is required by State and Federal law for all underground tanks that have been used to store regulated substances since January 1, 1974, that are in the ground as of May 8, 1986, or that are brought into use after May 8, 1986. The information requested is required by the Louisiana Environmental Quality Act, L.R.S. 30:1051 et seq., as amended.

The primary purpose of this registration program is to locate and evaluate underground tanks that store or have stored petroleum or hazardous substances. It is expected that the information you provide will be based on reasonably available records, or, in the absence of such records, your knowledge, belief, or recollection.

Who Must Register? The Louisiana Environmental Quality Act, L.R.S. 30:1051 et seq., as amended, requires that, unless exempted, owners of underground tanks that store regulated substances must notify the Louisiana Department of Environmental Quality of the existence of their tanks. Owner means—

(a) in the case of an underground storage tank in use on November 8, 1984, or brought into use after that date, any person who owns an underground storage tank used for the storage, use, or dispensing of regulated substances; and

(b) in the case of any underground storage tank in use before November 8, 1984, but no longer in use on that date, any person who owned such tank immediately before the discontinuation of its use.

What Tanks Are Included? Underground storage tank is defined as any one or combination of tanks that (1) is used to contain an accumulation of "regulated substances," and (2) whose volume (including connected underground piping) is 10% or more beneath the ground. Some examples are underground tanks storing: 1. gasoline, used oil, or diesel fuel, and 2. industrial solvents, pesticides, herbicides or fumigants.

NOTE: Underground storage tanks of less than 500 gallon capacity, which are required to be registered by the Environmental Protection Agency, shall likewise register with the state; however, these tanks are exempt from Louisiana fees and regulations.

What Tanks Are Excluded? Tanks excluded from Louisiana registration are:

1. farm or residential tanks with a capacity of less than 500 gallons used for storing motor fuel for noncommercial purposes;
2. tanks used for storing heating oil for consumptive use on the premises where stored;
3. septic tanks;
4. pipeline facilities (including gathering lines) regulated under the Natural Gas Pipeline Safety Act of 1968, or the Hazardous Liquid Pipeline Safety Act of 1979, or which is an intrastate pipeline facility regulated under State laws;

5. surface impoundments, pits, ponds, or lagoons;
6. storm water or waste water collection systems;
7. flow-through process tanks;
8. liquid traps or associated gathering lines directly related to oil or gas production and gathering operations;
9. storage tanks situated in an underground area (such as a basement, cellar, mineworking, drift, shaft, or tunnel) if the storage tank is situated upon or above the surface of the floor.

What Substances Are Covered? The registration requirements apply to underground storage tanks that contain regulated substances. This includes 1.) any substance defined in section 101(14) of the Comprehensive Environmental Response Compensation and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C of the Solid Waste Disposal Act as amended by RCRA); and 2.) petroleum including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute).

Where to Register? Completed registration forms should be sent to the address given at the top of this page.

When to Register? 1. Owners of underground storage tanks in use or that have been taken out of operation after January 1, 1974, but still in the ground, must register by May 8, 1986. 2. Owners who bring underground storage tanks into use after May 8, 1986, must register within 30 days of bringing the tanks into use.

Registration Fee: The owners of operational or non-operational underground storage tanks containing regulated substances must submit with the registration form the payment of the registration fee for each underground storage tank according to the following schedule:

1. For any substance defined in the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (but not including any substance regulated as a hazardous waste under Subtitle C of the Solid Waste Disposal Act as amended by RCRA)—\$25.00 per tank.
2. For petroleum, including crude oil or any fraction thereof which is liquid at standard conditions of temperature and pressure (60 degrees Fahrenheit and 14.7 pounds per square inch absolute)—\$15.00 per tank.

In no case shall one owner be required to pay an aggregate registration fee in excess of one thousand dollars (\$1,000.00). In addition to the registration fee, an annual monitoring and maintenance fee is required commencing May 8, 1987 in accordance with the regulations.

Penalties: Any owner who knowingly fails to register or submits false information shall be subject to a civil penalty not to exceed \$25,000 per day for each tank for which registration is not given or for which false information is submitted.

INSTRUCTIONS

Please type or print in ink all items except "signature" in Section V. This form must be completed for each location containing underground storage tanks. If more than 5 tanks are owned at this location, photocopy the reverse side, and staple continuation sheets to this form. Make checks payable to the Louisiana Department of Environmental Quality.

Indicate number of continuation sheets attached

I. OWNERSHIP OF TANK(S)

Owner Name (Corporation, Individual, Public Agency, or Other Entity)
MIMC GULF OUTPORT

Street Address
4400 DAUPHINE STREET

Parish
ORLEANS

City State Zip Code
NEW ORLEANS LOUISIANA 70146-6000

Area Code Phone Number
(504) 942-6196

Type of Owner (Mark all that apply ☒)

- | | | |
|----------------------------------|--|---|
| <input type="checkbox"/> Current | <input type="checkbox"/> State or Local Gov't. | <input type="checkbox"/> Private or Corporate |
| <input type="checkbox"/> Former | <input checked="" type="checkbox"/> Federal Gov't. (GSA facility I.D. no. _____) | <input type="checkbox"/> Ownership uncertain |

II. LOCATION OF TANK(S)

(If same as Section I, mark box here ☒)

Facility Name or Company Site Identifier, as applicable

Street Address or State Road, as applicable

Parish

City (nearest) State Zip Code

Latitude: _____°(deg.) _____'(min.) _____"(sec.)

Longitude: _____°(deg.) _____'(min.) _____"(sec.)

Indicate number of tanks at this location

4

Mark box here if tank(s) are located on land within an Indian reservation or on other Indian trust lands ☐

III. CONTACT PERSON AT TANK LOCATION

Name (If same as Section I, mark box here <input type="checkbox"/>)	Job Title	Area Code	Phone Number
MICHAEL A. ARNONE	Supervisory Civil Engineer Technician	(504)	942-6196

IV. TYPE OF REGISTRATION

☐ Mark Box here only if this is an amended or subsequent registration for this location.

V. CERTIFICATION (Read and sign after completing Section VI.)

I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete.

Name and official title of owner or owner's authorized representative

Signature

Date Signed

Michael A. Arnone 3/12/86

CONTINUE ON REVERSE SIDE

VI. DESCRIPTION OF UNDERGROUND STORAGE TANKS (Complete for each tank at this location.)					
Tank Identification No. (e.g., ABC-123), or Arbitrarily Assigned Sequential Number (e.g., 1,2,3...)	Tank No. 1	Tank No. 2	Tank No. 3	Tank No. 4	Tank No. 5
1. Status of Tank (Mark all that apply <input checked="" type="checkbox"/>) Currently in Use <input checked="" type="checkbox"/> Temporarily Out of Use <input type="checkbox"/> Permanently Out of Use <input type="checkbox"/> Brought into Use after 5/8/86 <input type="checkbox"/>	16699	16700	16701		16702
2. Age (Years)	Approx 6 Yrs.	Approx 6 Yrs.	Approx. 6 Yrs.		Approx. 40 Yrs.
3. Total Capacity (Gallons)	1000	1000	1000		1000
4. Is Tank and/or Piping Leaking? (YES or NO)	NO	NO	NO		NO
5. Material of Construction (Mark one <input checked="" type="checkbox"/>) Steel <input type="checkbox"/> Concrete <input type="checkbox"/> Fiberglass Reinforced Plastic <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Other, Please Specify _____					
6. Internal Protection (Mark all that apply <input checked="" type="checkbox"/>) Cathodic Protection <input type="checkbox"/> Interior Lining (e.g., epoxy resins) <input type="checkbox"/> None <input checked="" type="checkbox"/> Unknown <input type="checkbox"/> Other, Please Specify _____					
7. External Protection (Mark all that apply <input checked="" type="checkbox"/>) Cathodic Protection <input type="checkbox"/> Painted (e.g., asphaltic) <input type="checkbox"/> Fiberglass Reinforced Plastic Coated <input type="checkbox"/> None <input type="checkbox"/> Unknown <input type="checkbox"/> Other, Please Specify _____					
8. Piping (Mark all that apply <input checked="" type="checkbox"/>) Rigid Metal Conduit <input checked="" type="checkbox"/> Bare Steel <input type="checkbox"/> Galvanized Steel <input type="checkbox"/> Fiberglass Reinforced Plastic <input type="checkbox"/> Cathodically Protected <input type="checkbox"/> Unknown <input type="checkbox"/> Other, Please Specify _____					
9. Substance Currently or Last Stored in Greatest Quantity by Volume (Mark all that apply <input checked="" type="checkbox"/>) a. Empty <input type="checkbox"/> b. Petroleum <input checked="" type="checkbox"/> Diesel <input type="checkbox"/> Kerosene <input type="checkbox"/> Gasoline (including alcohol blends) <input type="checkbox"/> Used Oil <input type="checkbox"/> Other, Please Specify MIX c. Hazardous Substance <input checked="" type="checkbox"/> Please Indicate Name of Principal CERCLA Substance _____ OR Chemical Abstract Service (CAS) No. _____ Mark box <input checked="" type="checkbox"/> if tank stores a mixture of substances d. Unknown <input type="checkbox"/>					
10. Additional Information (for tanks permanently taken out of service) a. Estimated date last used (mo./yr.) _____ b. Estimated quantity of substance remaining (gal.) _____ c. Mark box <input type="checkbox"/> if tank was filled with inert material (e.g., sand, concrete) <input type="checkbox"/>					
11. Additional Information (for replacement tanks installed after January 1, 1974) a. Is the tank currently in use a replacement tank for one previously in use at the same site? (YES or NO) NO b. When was the previous tank removed? (mo./yr.) IN / 80s c. What was the age of the previous tank at time of removal? (years) Approx. 40 Yrs d. Was the tank and/or piping previously removed found to be leaking? (YES or NO) YES e. If so, was contamination of the regulated substance removed from the soil and/or ground water? (YES or NO) YES					

NOTE: Tanks 1, 2, and 3, contract numbers were DACA-80-B-0099 OR DACA63-80-C-0072.



DEPARTMENT OF THE ARMY
MILITARY TRAFFIC MANAGEMENT COMMAND
GULF OUTPORT
4400 DAUPHINE STREET, BUILDING 601-A
NEW ORLEANS, LOUISIANA 70146-6000

REPLY TO
ATTENTION OF:

April 22, 1986

Office of Facility Engineer

SUBJECT: Registration for Underground Storage Tanks

RECEIVED BY

APR 23 1986

GROUND WATER
PROTECTION DIVISION

Louisiana Department
Environmental Quality
Office of Solid & Hazardous Waste
Underground Storage Tank Program
Post Office Box 44274
Baton Rouge, Louisiana 70804-4274

Dear Sirs:

As required by your agency, Form for Registration for Underground Storage Tanks has been completed and is submitted for processing. Purchase Order No. DAHC21-86-M-4122 is enclosed to cover fees.

MTMC Gulf Outport has four 1000-gallon underground storage tanks used for petroleum products.

If there should be any questions, point of contact this Command is Michael J. Jambois, telephone (504) 942-6195.

Sincerely,

Michael A. Arnone
Chief, Office of Facility Engineer

Enclosures

Copy Furnished:

MTMC, Eastern Area, ATTN: MTE-LOE

MTMC, Western Area, ATTN: MTW-ENG

<input checked="" type="checkbox"/> CHECKED <input type="checkbox"/> ORDER FOR SUPPLIES OR SERVICES		<input type="checkbox"/> REQUEST FOR QUOTATIONS NO. 600 RETURN COPIES OF THIS QUOTE BY (THIS IS NOT AN ORDER. See DD Form 1155r)		PAGE: 1 OF 3	
1. CONTRACT/PURCH ORDER NO. DAH021-86-N-4221		2. DELIVERY ORDER NO.		3. DATE OF ORDER 86 MAR 19	
4. REQUISITION/PURCH REQUEST NO. W42VAB-6078-0003		5. CERTIFIED FOR NATIONAL DEFENSE UNDER DMS REG 1 DO		6. ISSUED BY: Contract Administration Station MCMC Gulf Outport 4400 Dauphine Street New Orleans, LA 70146-6000	
7. ADMINISTERED BY (If other than 6). W42VAC		8. DELIVERY FOB <input checked="" type="checkbox"/> DEST <input type="checkbox"/> OTHER (See Schedule if other)		9. CONTRACTOR/QUOTER L0752	
10. DELIVER TO FOB POINT BY SEE BELOW		11. CHECK IF BUSINESS IS <input type="checkbox"/> SMALL <input type="checkbox"/> SMALL DISADVANTAGED <input type="checkbox"/> WOMEN-OWNED		12. DISCOUNT TERMS NET	
13. MAIL INVOICES TO 5 COPIES - SEE BLOCK #15		14. SHIP TO: Commander MCMC Gulf Outport 4400 Dauphine Street New Orleans, LA 70146-6000		15. PAYMENT WILL BE MADE BY MTMC Eastern Area ATTN: MTE-RMF-P&E MILITARY OCEAN TERMINAL Bayonne, NJ 07002-5302	
16. TYPE OF ORDER DELIVERY PURCHASE <input checked="" type="checkbox"/>		This delivery order is subject to instructions contained on this side of form only and is issued on another Government agency or in accordance with and subject to terms and conditions of above numbered contract. Reference your _____ furnish the following on terms specified herein, including, for U.S. purchases, _____ General Provisions of Purchase Order on DD Form 1155r (EXCEPT CLAUSE NO 12 APPLIES ONLY IF THIS BOX <input type="checkbox"/> IS CHECKED, AND NO. 14 IF THIS BOX <input type="checkbox"/> IS CHECKED); special provisions _____ 10 USC 2304(a)(3) or as specified in the schedule if within the U.S., its possessions or Puerto Rico, if otherwise under 2304(a)(6). <input type="checkbox"/> If checked, Additional General Provisions apply; Supplier shall sign "Acceptance" on DD Form 1155r and return _____ copies.			
17. ACCOUNTING AND APPROPRIATION DATA/LOCAL USE 21 X 4992.0351 35 S28 113 1601 - 5100 - 60705 - 581					
18. ITEM NO. 001		19. SCHEDULE OF SUPPLIES/SERVICES REGISTRATION FEE FOR UNDERGROUND STORAGE TANKS, FROM 08 MAY 86 THROUGH 07 MAY 87.		20. QUANTITY ORDERED/ACCEPTED* 4	
21. UNIT EA		22. UNIT PRICE 15.00		23. AMOUNT 60.00	
24. UNITED STATES OF AMERICA 86 MAR 19 BY KATHLEEN R. DORAN CONTRACTING/ORDERING OFFICER		25. TOTAL \$60.00		26. QUANTITY IN COLUMN 20 HAS BEEN: <input type="checkbox"/> INSPECTED <input type="checkbox"/> RECEIVED <input type="checkbox"/> ACCEPTED, AND CONFORMS TO THE CONTRACT EXCEPT AS NOTED DATE _____ SIGNATURE OF AUTHORIZED GOVERNMENT REPRESENTATIVE _____	
27. SHIP NO. <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		28. D.O. VOUCHER NO.		29. DIFFERENCES INITIALS _____	
30. PAYMENT <input type="checkbox"/> COMPLETE <input type="checkbox"/> PARTIAL <input type="checkbox"/> FINAL		31. PAID BY		32. AMOUNT VERIFIED CORRECT FOR	
33. CHECK NUMBER		34. BILL OF LADING NO.		35. S/R ACCOUNT NUMBER	
36. S/R VOUCHER NO.		37. RECEIVED AT		38. RECEIVED BY	
39. DATE RECEIVED		40. TOTAL CONTAINERS		41. S/R ACCOUNT NUMBER	
42. S/R VOUCHER NO.		43. DATE RECEIVED		44. TOTAL CONTAINERS	

STANDARD FORM 36, JULY 1966 GENERAL SERVICES ADMINISTRATION FED. PROC. REG. (41 CFR) 1-16.101	CONTINUATION SHEET	REF. NO. OF DOC. BEING CONT'D.	PAGE 3	OF 3	
NAME OF OFFEROR OR CONTRACTOR					
ITEM NO.	SUPPLIES/SERVICES	QUANTITY	UNIT	UNIT PRICE	AMOUNT
	<p style="text-align: center;">MODIFY PURCHASE ORDER AS FOLLOWS:</p> <p><u>Delete</u> General Provision 3, Payments, in its entirety.</p> <p><u>Substitute</u> the following General Provision 3, Invoices:</p> <p>(a) An invoice is a written request for payment under the contract for supplies delivered or for services rendered. In order to be proper, an invoice must include as applicable the following:</p> <ul style="list-style-type: none"> (1) Invoice date. (2) Name of contractor. (3) Contract number (including order number, if any, contract line item number, contract description of supplies or services, quantity, contract unit of measure and unit price, and extended total. (4) Shipment number and date of shipment (Bill of Lading number and weight of shipment will be shown for shipments on Government Bills of Lading). (5) Name and address to which payment is to be sent (which must be the same as that in the contract or on a proper notice of assignment). (6) Name (where practicable), title, phone number and mailing address of person to be notified in event of a defective invoice, and (7) Any other information or documentation required by other provisions of the contract (such as evidence of shipment). Invoices shall be prepared and submitted in quadruplicate (one copy shall be marked, "Original unless otherwise specified."). <p>(b) For purposes of determining if interest begins to accrue under the Prompt Payment Act (Public Law 97-177).</p> <ul style="list-style-type: none"> (1) A proper invoice will be deemed to have been received when it is received by the office designated in the contract for receipt of invoices and acceptance of the supplies delivered or services rendered has occurred. (2) Payment shall be considered made on the date on which a check for such payment is dated. (3) Payment terms (e.g. "NET 20") offered by the contractor will not be deemed, "required payment dates", and (4) The following periods of time will not be included: <ul style="list-style-type: none"> a. After receipt of an improper invoice and prior to notice of any defect or impropriety, but not to exceed 15 days (or any lesser period established by this contract), and b. Between the date of a notice of any defective or impropriety and the date a proper invoice is received. When the notice is in writing, it shall be considered made on the date shown on the notice." 				

RECEIVED BY

APR 23 1986

GROUND WATER
PROTECTION DIVISION

APPENDIX D

CERCLIS LISTING FOR NEW ORLEANS

CERCLIS ALPHABETICAL LISTING BY STATE
CERCLIS VERSION 2.0

LA

EPA ID NO.	SITE NAME	SITE LOCATION	CITY	COUNTY
LA0981056997	AGRICULTURE STREET LANDFILL	4100 TOUR STREET	NEW ORLEANS	ORLEANS
LA0008139417	AIRCO INDUSTRIAL GASES	15200 INTRACOASTAL DR	NEW ORLEANS	ORLEANS
LA0000209395	ALGIERS LANDFILL	LA HWY 406	NEW ORLEANS	ORLEANS
LA0980622229	AMERICAN SHOT & LEAD CO	ST JOSEPH & CONSTANCE ST	NEW ORLEANS	ORLEANS
LA0982292302	ATLAS ERECTION & CRANE RENTAL	11600 OLD GENTILLY	NEW ORLEANS	ORLEANS
LA0990683658	BIONUCLEAR INC	4031 JEFFERSON HWY	NEW ORLEANS	ORLEANS
LA0990621536	BOEING CO THE MICHOUD ASSEMBLY FACILITY	OLD GENTILLY ROAD	NEW ORLEANS	ORLEANS
LA0980621767	BROWNING-FERRIS IND - LANDFILL	6699 FLORIDA AVE.	NEW ORLEANS	ORLEANS
LA0980621775	BROWNING-FERRIS IND-CRESCENT ACRES LDF	6699 FLORIDA AVENUE	NEW ORLEANS	ORLEANS
LA0008155996	CITADEL CEMENT CORPORATION	2315 FRANCE STREET	NEW ORLEANS	ORLEANS
LA0980750778	CONAWAY TRUCK SERVICE	1132 ELYSIAN FIELDS	NEW ORLEANS	ORLEANS
LA0980880199	FLORIDA AVENUE WHARF SITE	FLORIDA AVENUE	NEW ORLEANS	ORLEANS
LA0953782413	GENERAL ELECTRIC CO	1115 DE ARMAS ST	NEW ORLEANS	ORLEANS
LA0980621817	GENTILLY LANDFILL	10200 OLD GENTILLY RD	NEW ORLEANS	ORLEANS
LA0985169653	INDUSTRIAL CANAL	CANAL STREET	NEW ORLEANS	ORLEANS
LA0041224684	LIQUID AIR CORP.	P.O. BOX 26367	NEW ORLEANS	ORLEANS
LA1801114587	NASA-MARTIN MARIETTA AEROSPACE	13800 OLD GENTILLY RD	NEW ORLEANS	ORLEANS
LA0092096106	NATIONAL OIL SERVICE OF LOUISIANA	14890 INTRACOASTAL DR	NEW ORLEANS	ORLEANS
LA0096947569	RECOVERY 1	17000 CHEF MENTEUR HWY	NEW ORLEANS	ORLEANS
LA0069524351	RHEEM MANUFACTURING COMPANY	4901 JEFFERSON HWY	NEW ORLEANS	ORLEANS
LA0985169671	SEAWALL	SEA ISLE	NEW ORLEANS	ORLEANS
LA3120507345	SOUTHERN REGIONAL RESEARCH CENTER	1100 ROBERT E. LEE BLVD	NEW ORLEANS	ORLEANS
LA0008155657	THOMPSON-HAYWARD CHEMICAL COMPANY	7700 EARHARD BLVD.	NEW ORLEANS	ORLEANS
LA6170022788	US NAVY NEW ORLEANS NAVAL AIR STATION	BLDG 50, CODE 70	NEW ORLEANS	ORLEANS
LA6170022604	US NAVY NEW ORLEANS NAVAL SUPPORT ACTION	2600 GEN MEYER AVE BLDG 101	NEW ORLEANS	ORLEANS

APPENDIX E

**REGISTERED WELLS WITHIN ORLEANS PARISH
(EXCERPTS)**



LOUISIANA DEPARTMENT OF TRANSPORTATION AND DEVELOPMENT
P.O. Box 94245, Baton Rouge, Louisiana 70804-9245

(504) 379-1434

NEIL L. WAGONER, P.E.
SECRETARY

November 8, 1989

BUDDY ROEMER
GOVERNOR

Mr. Tim Farrell
Roy F. Weston, Inc.
Goshen Office
Weston Way
West Chester, PA 19380

Re: Water Well Listing
User Supplied Coordinates
N 30 00' 00"; S 29 57' 00"
E 90 01' 00"; W 90 05' 00"
Orleans Parish

Dear Mr. Farrell:

As per your request of October 30, 1989, we are herewith enclosing the following for your information:

- 1) A computer printout listing registered water wells and pertinent information about the wells
- 2) An explanation of the codes used on the printout
- 3) A library copy of W.R. Bulletin No. 9
- 4) A library copy of W.R. Basic Records Report No. 11
- 5) A library copy of G.S. Water-Supply Paper 1296

Please be advised that this list does not include every possible water well which may have been drilled within the above-referenced coordinates. The list represents only those wells which have been registered with this Department or scheduled by the U.S. Geological Survey and does not include those which are presently being processed.

These library copies of reports are loaned to you on the condition that they be returned to this Department as soon as possible.

Mr. Timothy M. Farrell
November 8, 1989
Page - 2 -

This information is made available through our cooperative water resources program with the U.S. Geological Survey.

If we may be of any further assistance, please do not hesitate to contact this office.

Very truly yours,

A handwritten signature in dark ink, appearing to read "Z. Bolourchi". The signature is fluid and cursive, with a large initial "Z" and a stylized "B".

Z. "Bo" Bolourchi, P.E.
Chief, Water Resources Section

ZB:cec
ATTACHMENT

WELL 2071 11/07/89	REGISTERED WATER WELLS IN ORLEANS				PARISH --WITHIN GIVEN COORDINATES				PAGE		
IDENTIFICATION NUMBER	SOUTH- 300000	EAST- 900100	WEST- 900800	WELL NUMBER	OWNERS NAME	WELL DEPTH	WELL USE	SUB USE	DATE COMPLETED	PUMPING RATE (GPD)	AVAILABLE INFORMATION
-----AQUIFER--GONZALES-NEW ORLEANS AQUIFER-----											
295705090041601				1	HIBERNIA BANK	757	ABANDONED	--	0138		L C
295705090041602				2	HIBERNIA BANK	748	OTHER	-U	0138		C
295718090040901				3	D H HOLMES CO	750	ABANDONED	--	0139		C
295830090041201				6	JOSEPH WADDELL	800	ABANDONED	--	0125		C
295723090034601				7	JACKSON BREW CO	775	ABANDONED	--	0101		
295722090034701				8	JACKSON BREW CO	777	INDUSTRIAL	99	0140		L
295723080041501				9	N O ATHLETIC CL	785	PUBLIC SUPPLY	-T	1040		C
295731090011901				11	GARDENER-SHIPPE	760	ABANDONED	--	0108		C
295721090040401				12	AMERICAN BREW	780	INDUSTRIAL	99	0733		C
295715080044601				24	NEW ORLEANS PSI	790	ABANDONED	--			C
295827090013901				43	FLINTKOTE CO	750	INDUSTRIAL	99	0138		L C
295907090013101				44	U S ARMY	728	ABANDONED	--	0642		L C
295929080013501				46	PORT OF NEW ORL	700	ABANDONED	--	0543		L C
295720090040901				48	D H HOLMES CO	758	OTHER	-U	0650		L C
295828090013801				52	FLINTKOTE CO	730	INDUSTRIAL	99	0746		L C
295823090014001				53	FLINTKOTE CO		OTHER	-U			L
295723090034501				54	JACKSON BREW CO	755	INDUSTRIAL	99	0747		
295721090040402				64	AMERICAN BREW	800	ABANDONED	--	0147		C
295718090040902				65	D H HOLMES CO	750	ABANDONED	--	0147		
295805090032201				82	SCHWEGMANN BROS	727	INDUSTRIAL	99	0752		L C
295828090014201				117	MASONITE CORP	732	INDUSTRIAL	99	0257		L C
295855090012501				118	BULK TRANSPORT	735	INDUSTRIAL	99	0759		
295714090041401				120	NEW ORLEANS	630	ABANDONED	--	0154		L
295844090014101				129	LONE STAR CEMEN	726	INDUSTRIAL	99	0551		L
295738080021001				130	REUTHER SEAFOOD	736	PUBLIC SUPPLY	-C	0357		L

REGISTERED WATER WELLS IN ORLEANS PARISH --WITHIN GIVEN COORDINATES

WELL 2071 11/07/89

WELL IDENTIFICATION NUMBER

SOUTH- 300000 SOUTH- 295700 EAST- 900100 WEST- 900500
OWNERS NAME WELL NUMBER OWNERS WELL NUMBER DEPTH

AVAILABLE INFORMATION

PUMPING RATE(GPD)

DATE COMPLETED

SUB USE

WELL USE

WELL NUMBER

WELL NUMBER

WELL NUMBER

WELL NUMBER

WELL NUMBER

WELL NUMBER

WELL NUMBER

WELL NUMBER

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-S

0256

OTHER

1

750

OTHER

131

HIBERNIA BANK

295705090041603

1

775

OTHER

132

JUNG HOTEL

295727090043601

132

0148

-U

L C

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0352

OTHER

133

V A HOSPITAL

295718090044801

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620

TEST HOLE

192

LA PUBLIC WORKS

295958090040301

192

700

INDUSTRIAL

194

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INDUSTRIAL

211

REUTHER SEAFOOD

295738090020701

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REUTHER SEAFOOD

295738090020701

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INDUSTRIAL

2

84000

PA

1975

EL C

31

WELL 2071 11/07/89	REGISTERED WATER WELLS IN ORLEANS				PARISH --WITHIN GIVEN COORDINATES				PAGE		
IDENTIFICATION NUMBER	SOUTH- 285700	EAST- 900100	WEST- 900500	WELL NUMBER	WELL OWNERS	WELL DEPTH	WELL USE	SUB USE	DATE COMPLETED	PUMPING RATE (GPD)	AVAILABLE INFORMATION
295923090032404	AMOCO OIL	-5125Z	4	13	MONITOR	--	1086	L	W		
295817090022301	AMOCO OIL	-5126Z	1	11	MONITOR	--	1086	L	W		
295817090022302	AMOCO OIL	-5127Z	2	11	MONITOR	--	1086	L	W		
295817090022303	AMOCO OIL	-5128Z	3	11	MONITOR	--	1086	L	W		
295817090022304	AMOCO OIL	-5129Z	4	11	MONITOR	--	1086	L	W		
295928090025701	AMOCO OIL	-5130Z	4	12	MONITOR	--	1086	L	W		
295922090042201	TEXACO	-5288Z	MW-6	15	MONITOR	--	1188	L	W		
295922090042202	TEXACO	-5289Z	MW-7	15	MONITOR	--	1188	L	W		
295922090042203	TEXACO	-5290Z	MW-8	15	MONITOR	--	1188	L	W		
295953090020601	REG TRANSIT AUT	-5293Z	MW-1	14	MONITOR	--	0189	L	W		
295953090020602	REG TRANSIT AUT	-5294Z	MW-2	14	MONITOR	--	0189	L	W		
295953090020603	REG TRANSIT AUT	-5295Z	MW-3	14	MONITOR	--	0189	L	W		
295953090020604	REG TRANSIT AUT	-5296Z	MW-4	14	MONITOR	--	0189	L	W		
295953090020605	REG TRANSIT AUT	-5297Z	MW-5	14	MONITOR	--	0189	L	W		
295953090020606	REG TRANSIT AUT	-5298Z	MW-6	14	MONITOR	--	0189	L	W		
295820090032501	TOC RETAIL	-5312Z	MW-1	12	MONITOR	--	0389	L	W		
295825090025505	TOC RETAIL	-5313Z	MW-5	10	MONITOR	--	0289	L	W		
295825090025506	TOC RETAIL	-5314Z	MW-6	10	MONITOR	--	0289	L	W		
TOTAL NUMBER OF REGISTERED WATER WELLS BY AQUIFER CODE										36	
-----AQUIFER--700-FOOT SAND OF NEW ORLEANS AREA-----											
29570709004001	NEW ORLEANS	-163	753	ABANDONED	--	1061	EL				
TOTAL NUMBER OF REGISTERED WATER WELLS BY AQUIFER CODE										1	
-----AQUIFER--1200-FOOT SAND OF NEW ORLEANS AREA-----											
295723090041502	UNKNOWN	-10	1248	DESTROYED	--	1237	L C				
295723090041503	N O ATHLETIC CL	-161	1251	PUBLIC SUPPLY	-T	0861	EL				
TOTAL NUMBER OF REGISTERED WATER WELLS BY AQUIFER CODE										2	

REGISTERED WATER WELLS IN ORLEANS PARISH --WITHIN GIVEN COORDINATES

WELL2071
11/07/89
NORTH- 300000 SOUTH- 295700 EAST- 900100 WEST- 900800
IDENTIFICATION OWNERS NAME WELL OWNERS WELL NUMBER NUMBER DEPTH

WELL USE SUB DATE DATE COMPLETED PUMPING RATE(GPD) AVAILABLE INFORMATION

-----AQUIFER-- ALL AQUIFERS-----

TOTAL NUMBER OF REGISTERED WATER WELLS IN PARISH WITHIN COORDINATES 70

**EXPLANATION OF TERMS FOR THE COMPUTERIZED
LISTING OF WATER WELLS AND HOLES WITHIN SPECIFIED COORDINATES**

IDENTIFICATION NUMBER	-	This is a unique number that includes the latitude (first six numbers), longitude (second six numbers), and a sequential number which indicates the number of this well when other nearby wells have the same latitude and longitude.
REVISED COORDINATE	-	The top number is the identification number and the bottom number is the actual latitude and longitude of the well. (This is shown only if the identification number and the actual latitude and longitude are different).
OWNER'S NAME	-	Name of the individual, person, company or agency that owns or leases the well, and operates the well.
WELL NUMBER	-	Well Number, by parish, assigned by the U.S. Geological Survey and/or DOTD.
OWNER'S NUMBER	-	Well name or number assigned by the owner to identify each well.
WELL DEPTH	-	Depth of the well, in feet, measured from bottom of the screen to the ground surface.
WELL USE	-	Main use of the well.
WELL SUBUSE	-	Subuse of the well (see attached sheet).
DATE COMPLETED	-	The month and year the well was completed and/or accepted by the owner or lessee.
PUMPING RATE	-	Average daily pumping rate (GPD) as shown on the original registration form. A blank indicates the pumping rate is unknown.
AVAILABLE INFORMATION	-	Indicates available information as follows: E, geophysical log; L, drillers log; D, drill cuttings; C, chemical analysis; B, bacteriological analysis; P, pumping test; W, water level. Available information may be obtained from the DOTD, USGS, drilling contractor and/or other sources.

DOTD'S USE AND SUB-USE COMPUTER
CODES FOR WATER WELLS AND HOLES

USE	SUB-USE
A Abandoned	- -
B Plugged	- -
C Destroyed	- -
D Dewatering	- -
E Power Generation	- -
H Domestic	- -
I Irrigation/Agriculture	- -
L Heat Pump	H H hole H S supply well
M Monitor	- - P A plugged
N Industrial	2 0 Food and kindred products 2 2 Textile mill products 2 4 Lumber & wood products 2 6 Paper & allied products 2 8 Chemicals & allied products 2 9 Petroleum refining and related industries 3 3 Primary metal industries 9 9 Other
O Observation	- 0 Multiple Purpose - P Piezometer - Q Water Quality - W Water Level
P Public Supply	- C Commercial - M Therapeutic - P Municipal - R Rural - T Institution/Government - - Other
R Recovery	- -
S Rig Supply	- -
T Test Hole	- - P A plugged
Z Other	- C Cathodic - F Fire Protection - I Inactive - R Reworked - S Standby - U Unknown - Z Other

ZB:DL:clj
Aug. 18, 1986

APPENDIX F

SPECIES SURVEY - NEW ORLEANS



Virginia Van Sickle
SECRETARY

DEPARTMENT OF WILDLIFE AND FISHERIES
LOUISIANA NATURAL HERITAGE PROGRAM

Buddy Roemer
GOVERNOR

P.O. Box 98000
Baton Rouge, LA 70898

8 November 1989

Tim Farrell
R. F Weston Co.-Goshen Office
Weston Way
West Chester, PA 19380

Dear Mr. Farrell:

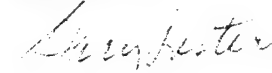
As per your request of 3 November, we have examined our database for any known occurrences of rare, threatened or endangered species within 3 miles of the proposed military ship loading port at the junction of the Mississippi River Gulf Outlet and the main channel of the Mississippi River. We do not have any records of sensitive species near the project site; however, a thorough survey has, to our knowledge, never been conducted.

We also conducted a search of our database for any records of sensitive species within the Mississippi River channel (i.e., between the levees and within the delta) from New Orleans to the mouth of the river. We have two records of the pallid sturgeon (Scaphirhynchus albus) from the main channel. This species has been proposed for federal listing. We also have records of another apparently rare fish, the saltmarsh topminnow (Fundulus jenkinsi), from the deltaic marshes. Finally, there are at least seven waterbird nesting colonies in this stretch of the river, also in the deltaic marshes.

I have also enclosed a list of all vertebrates documented from Orleans Parish. Any of those species could potentially be found at the project site. Refer to the enclosed list of LNHP-listed species to determine if any sensitive species could possibly be found at the site.

I hope these data are useful. If we can be of any further assistance, do not hesitate to contact us at the above address or (504) 765-2821.

Sincerely,



Gary Lester
LNHP-Coordinator

enclosures

GDL:RPM:rpm

CC: Fred Dunham

LOUISIANA NATURAL HERITAGE PROGRAM
SPECIAL ANIMALS

Scientific Name	Common Name	SRANK	GRANK	Scientific Name	Common Name	SRANK	GRANK
INVERTEBRATES							
Dubiraphia parva	little riffle beetle	S1S3	G1G3	Notropis potteri	chub shiner	S3	G5
Brachycercus flavus	yellow brachycercus mayfly	SH	GH	Notropis sabinae	Sabine shiner	S4	G4
Leuctra szczytkoi	Schoolhouse Springs stonefly	S1	G1G3	Notropis signipinnis	flagfin shiner	SU	G5?
Alasmidonta marginata	elktoe (mussel)	S?	G5	Notropis welaka	bluenose shiner	S3	G4
Ellipsaria lineolata	butterfly (mussel)	S?	G4	Notropis whipplei	steelcolor shiner	S2	G5
Elliptio crassidens	elephant-ear (mussel)	S2S3	G4	Phenacobius mirabilis	suckermouth minnow	S3	G5
Elliptio dilatata	spike (mussel)	S?	G5	Carpionodes cyprinus	quiltback	S2	G5
Fusconaia ebena	ebonyshell (mussel)	S1S3	G3	Carpionodes velifer	highfin carpsucker	S2S3	G3G4
Lampsilis ornata	southern pocketbook (mussel)	S1?	G1?	Cycleptus elongatus	blue sucker	S2	G5
Lasmigona complanata	white heelsplitter (mussel)	S?	G5	Moxostoma carinatum	river redhorse	S2	G4
Ligumia recta	black sandshell (mussel)	S?	G5	Noturus flavus	stonecat	SA	G5
Margaritifera hembeli	Louisiana pearlshell (mussel)	S1	G1	Noturus munitus	frecklebelly madtom	S3	G3
Obovaria jacksoniana	southern hickorynut (mussel)	S1S2	G1G2	Fundulus jenkinsi	saltmarsh topminnow	S2S3	G3
Obovaria unicolor	Alabama hickorynut (mussel)	S1S3	G2G3	Fundulus euryzonus	broadstripe topminnow	S2	G2
Pleurobema cordatum	Ohio pigtoe (mussel)	S?	G4	Ammocrypta asprella	crystal darter	S3	G3
Potamilus capax	fat pocketbook (mussel)	S?	G1	Ammocrypta clara	western sand darter	S2	G3
Potamilus inflatus	inflated heelsplitter (mussel)	S1	G1	Etheostoma caeruleum	rainbow darter	S3	G5
Potamilus laevisima	pink papershell (mussel)	S?	G5	Percina lenticula	freckled darter	S2	G2
Quadrula nodulata	wartyback (mussel)	S1S3	G3	Percina macroleptida	bigscale logperch	S1S2	G4
Strophitus subvexus	southern creekmussel	S1	G1	Percina uranidea	stargazing darter	SA	G3
Strophitus undulatus	squawfoot (mussel)	S?	G5	Percina sp 8	(from LA)	S?	G?
FISH							
Acipenser fulvescens	lake sturgeon	S1	G3	Ambystoma tigrinum	eastern tiger salamander	S1	G5
Acipenser oxyrinchus	Atlantic sturgeon	S1	G3	Amphiuma means	two-toed amphiuma	S2	G5
Scaphirhynchus albus	pallid sturgeon	S1?	G1	Eurycea cirrigera	southern two-lined salamander	S3?	G5?
Polyodon spathula	paddlefish	S3	G4	Hemidactylium scutatum	four-toed salamander	S1	G5
Alosa alabamae	Alabama shad	S2S3	G4	Plethodon serratus	southern redback salamander	S1	G3q
Camptostoma anomalum	central stoneroller	S2	G5	Plethodon websteri	Webster's salamander	S1	G5
Ericymba buccata	silverjaw minnow	S3S4	G5	Pseudotriton montanus	gulch coast mud salamander	S1	G5
Hybopsis gelida	sturgeon chub	SA	G3	Pseudotriton ruber	southern red salamander	S1	G5
Hybopsis gracilis	flathead chub	SA	G4	Pseudacris ornata	ornate chorus frog	SH	G5
Hybopsis meeki	sicklefin chub	SA	G2	Pseudacris streckeri	Strecker's chorus frog	S1	G5?
Notropis boops	bigeye shiner	S2	G5	Rana areolata sevoa	dusky crawfish frog	S2	G4T2
Notropis camurus	bluntnose shiner	S3	G5				
Notropis hubbsi	bluehead shiner	S2	G3				

Scientific Name	Common Name	SRANK	GRANK	Scientific Name	Common Name	SRANK	GRANK
REPTILES							
Caretta caretta	loggerhead	S1	G3	Elanoides forficatus	American Swallow-tailed Kite	S1	G5
Chelonia mydas	green turtle	SN	G3	Elanus caeruleus	Black-shouldered Kite	S1	G5
Eretmochelys imbricata	hawksbill	SN	G3?	Haliaeetus leucocephalus	Bald Eagle	S3	G3
Lepidochelys kempii	Kemp's ridley	S1	G1	Accipiter cooperii	Cooper's Hawk (nesting)	S1	G4
Macrochelys temminckii	alligator snapping turtle	S3?	G3?	Buteo platypterus	Broad-winged Hawk (nesting)	S3	G5
Dermochelys coriacea	leatherback	SN	G3	Aquila chrysaetos	Golden Eagle	S1	G4
Graptemys geographica	map turtle	SU	G5	Polyborus plancus	Crested Caracara	S1	G5
Graptemys oculifera	ringed map turtle	S2	G2	Falco peregrinus	Peregrine Falcon	S2	G3
Graptemys pulchra	Alabama map turtle	S3	G4?	Laterallus jamaicensis	Black Rail	S2?	G3G4
Malaclemys terrapin	diamond back terrapin	S2	G5	Grus canadensis	Sandhill Crane	S1	G5
Terrapene ornata	ornate box turtle	S2	G5	Grus americana	Whooping Crane	SH	G1
Sternotherus minor	striped neck musk turtle	S1	G5	Charadrius alexandrinus	Snowy Plover	S2?	G4?
Gopherus polyphemus	gopher tortoise	S1	G2	Charadrius melodus	Piping Plover	S2	G2
Trionyx muticus calvatus	Gulf Coast smooth softshell	S3	G5?	Haematopus palliatus	American Oystercatcher	S1	G5
Ophisaurus ventralis	eastern glass lizard	S3?	G5	Numenius borealis	Eskimo Curlew	SH	G1
Eumeces septentrionalis	southern prairie skink	S1	G5	Sterna nilotica	Gull-billed Tern	S2	G5
Carphophis amoenus vermis	western worm snake	S3?	G5?	Sterna caspia	Caspian Tern (nesting)	S3	G5
Coluber constrictor	tan racer	SU	G5?	Sterna antillarum	Least Tern	S2	G4
etheridgei				Sterna antillarum	Interior Least Tern	S1	G4?
Farancia erythrogramma	rainbow snake	S2?	G5	athalassos			
Lampropeltis calligaster	mole kingsnake	S3	G5?	Sterna fuscata	Sooty Tern	S1	G5
rhombomaculata				Zenaidura macroura	White-winged Dove	S3	G5
Pituophis melanoleucus	pine snake	S3	G5	Columba passerina	Common Ground-dove (nesting)	S2	G5
Pituophis melanoleucus	black pine snake	S1	G5?	Crotaphaga sulcirostris	Groove-billed Ani	S3	G5
lodingi				Asio flammeus	Short-eared Owl	S1	G5
Pituophis melanoleucus	Louisiana pine snake	S3	G5?	Picoides borealis	Red-cockaded Woodpecker	S2	G2
ruthveni				Campephilus principalis	Ivory-billed Woodpecker	SH	G1
Rhadinaea flavilata	pine woods snake	S2	G4?	Empidonax traillii	Willow Flycatcher (nesting)	S1	G5
Micrurus fulvius fulvius	eastern coral snake	S3	G5?	Eremophila alpestris	Horned Lark (nesting)	S2S3	G5
Crotalus adamanteus	eastern diamondback rattlesnake	S1	G5	Sitta carolinensis	White-breasted Nuthatch	S3	G5
BIRDS							
Pelecanus erythrorhynchos	American White Pelican	S3	G3	Vireo bellii	Bell's Vireo (nesting)	S1	G5
Pelecanus occidentalis	Brown Pelican	S1	G5	Vireo gilvus	Warbling Vireo (nesting)	S1	G5
Egretta rufescens	Reddish Egret	S2	G4	Vermivora bachmanii	Bachman's Warbler	SH	G5
Plegadis falcinellus	Glossy Ibis	S2	G5	Dendroica petechia	Yellow Warbler (nesting)	SU	G5
Ajaia ajaja	Roseate Spoonbill	S2	G5	Helminthophila vermivorus	Worm-eating Warbler (nesting)	S1	G5
Cygnus buccinator	Trumpeter Swan	SH	G4	Seiurus motacilla	Louisiana Waterthrush (nesting)	S2S3	G5
Anas rubripes	American Black Duck	S3S4	G4	Amphispiza aestivalis	Bachman's Sparrow (nesting)	S3?	G3
Pandion haliaetus	Osprey (nesting)	S2	G5	Ammodramus savannarum	Grasshopper Sparrow	S3?	G4
				Ammodramus henslowii	Henslow's Sparrow	S3	G4
				Sturnella neglecta	Western Meadowlark (nesting)	S?	G5

Scientific Name	Common Name	SRANK	GRANK
***MAMMALS**			
<i>Sorex longirostris</i>	southeastern shrew	S2?	G5
<i>Lasionycteris noctivagans</i>	silver-haired bat	S1	G5
<i>Eptesicus fuscus</i>	big brown bat	S2?	G5Q
<i>Marmota monax</i>	woodchuck	SA	G5
<i>Perognathus hispidus</i>	hispid pocket mouse	S2	G5
<i>Reithrodontomys humulis</i>	eastern harvest mouse	S3S4	G5
<i>Mesoplodon densirostris</i>	Blainville's beaked whale	SN	G?
<i>Ziphius cavirostris</i>	goose-beaked whale	SN	G?
<i>Physeter macrocephalus</i>	sperm whale	SN	G2
<i>Kogia simus</i>	dwarf sperm whale	SN	G?
<i>Stenella plagiodon</i>	Atlantic spotted dolphin	S3S4	G?
<i>Stenella clymene</i>	short-snouted spinner dolphin	SN	G?
<i>Stenella coeruleoalba</i>	striped dolphin	SN	G?
<i>Delphinus delphis</i>	saddle-backed dolphin	S3?	G?
<i>Pseudorca crassidens</i>	false killer whale	SN	G?
<i>Globicephala macrorhynchus</i>	short-finned pilot whale	SN	G?
<i>Balaenoptera physalus</i>	finback whale	SN	G2
<i>Balaenoptera borealis</i>	sei whale	SN	G2
<i>Balaenoptera acutorostrata</i>	little piked or minke whale	SN	G5
<i>Balaenoptera musculus</i>	blue whale	SN	G2
<i>Balaenoptera edeni</i>	Bride's whale	SN	G?
<i>Canis rufus</i>	red wolf	SH	GH
<i>Ursus americanus</i>	black bear	S2	G5
<i>Bassariscus astutus</i>	ringtail	S?	G5
<i>Mustela frenata</i>	long-tailed weasel	S2	G5
<i>Spilogale putorius</i>	eastern spotted skunk	S2	G5
<i>Felis concolor coryi</i>	Florida panther	SH	G4T1
<i>Trichechus manatus</i>	manatee	SA	G2?

ELEMENT RANKING

Each element is assigned a single global rank; in addition, it receives a state rank for each state in which it occurs. State ranks within each state are assigned by the state Heritage program, and the rank for any particular element may vary considerably from state to state. Global ranking is done under the guidance of the National Science Department of The Nature Conservancy.

GLOBAL ELEMENT RANKS:

- G1 = Critically imperiled globally because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres) or because of some factor(s) making it especially vulnerable to extinction.
- G2 = Imperiled globally because of rarity (6 to 20 occurrences or few remaining individuals or acres) or because of some factor(s) making it very vulnerable to extinction throughout its range.
- G3 = Either very rare and local throughout its range or found locally (even abundantly at some of its locations) in a restricted range (e.g., a single western state, a physiographic region in the East) or because of other factors making it vulnerable to extinction throughout its range; in terms of occurrences, in the range of 21 to 100.
- G4 = Apparently secure globally, though it may be quite rare in parts of its range, especially at the periphery.
- G5 = Demonstrably secure globally, though it may be quite rare in parts of its range, especially at the periphery.
- GH = Of historical occurrence throughout its range, i.e., formerly part of the established biota, with the expectation that it may be rediscovered (e.g., Bachman's Warbler).
- GU = Possibly in peril range-wide but status uncertain; need more information. NOTE: This rank should be used sparingly. Whenever possible, assign the most likely rank and add a question mark (e.g., G2?) to express uncertainty, or use a range (e.g., G2G3) to delineate the limits (range) of uncertainty.
- GX = Believed to be extinct throughout range (e.g., Passenger Pigeon) with virtually no likelihood that it will be rediscovered.

STATE ELEMENT RANKS:

- S1 = Critically imperiled in state because of extreme rarity (5 or fewer occurrences or very few remaining individuals or acres) or because of some factor(s) making it especially vulnerable to extirpation from the state.
- S2 = Imperiled in state because of rarity (6 to 20 occurrences or few remaining individuals or acres) or because of some factor(s) making it very vulnerable to extirpation from the state.
- S3 = Rare or uncommon in state (on the order of 21 to 100 occurrences).
- S4 = Apparently secure in state, with many occurrences.
- S5 = Demonstrably secure in state and essentially ineradicable under present conditions.
- SA = Accidental in state, including species (usually birds or butterflies) recorded once or twice or only at very great intervals, hundreds or even thousands of miles outside their usual range; a few of these species may even have bred on the one or two occasions they were recorded.
- SH = Of historical occurrence in the state but no recent records; may still exist. Upon verification of an extant occurrence, SH-ranked elements would typically receive an S1 rank. The SH rank is reserved for elements for which some effort has been made to relocate occurrences, rather than simply ranking all elements not known from verified extant occurrences with this rank.
- SU = Possibly in peril in state but status uncertain; need more information.
NOTE: This rank is used infrequently, if the status of a species in the state is questionable a range of ranks (e.g., S1S3) is used or a question mark is added to the rank considered most appropriate (e.g., S1?).
- SX = Apparently extirpated from state.

VERTEBRATES RECORDED FROM ORLEANS PARISH

****FISH****

SPOTTED GAR
LONGNOSE GAR
SHORTNOSE GAR
ALLIGATOR GAR
AMERICAN EEL
GIZZARD SHAD
THREADFIN SHAD
REDFIN PICKEREL
CHAIN PICKEREL
GOLDFISH
GOLDEN SHINER
RIVER CARPSUCKER
CREEK CHUBSUCKER
LAKE CHUBSUCKER
SMALLMOUTH BUFFALO
BIGMOUTH BUFFALO
BLACK BUFFALO
SPOTTED SUCKER
BLACKTAIL REDHORSE
BLACK BULLHEAD
PIRATE PERCH
YELLOW BULLHEAD
CHANNEL CATFISH
FLATHEAD CATFISH
GOLDEN TOPMINNOW
SALTMARSH TOPMINNOW
BLACKSTRIPE TOPMINNOW
BLACKSPOTTED TOPMINNOW
MOSQUITOFISH
SAILFIN MOLLY
BROOK SILVERSIDE
FLIER
GREEN SUNFISH
WARMOUTH
ORANGESPOTTED SUNFISH
BLUEGILL
DOLLAR SUNFISH
LONGEAR SUNFISH
REDEAR SUNFISH
SPOTTED SUNFISH
BANTAM SUNFISH
SPOTTED BASS
LARGEMOUTH BASS
WHITE CRAPPIE

BLACK CRAPPIE
BANDED PYGMY SUNFISH
FRESHWATER DRUM

****AMPHIBIANS****

THREE-TOED AMPHIUMA
DUSKY SALAMANDER
DWARF SALAMANDER
CENTRAL NEWT
GULF COAST TOAD
WOODHOUSE'S TOAD
NORTHERN CRICKET FROG
BIRD-VOICED TREEFROG
COPE'S GRAY TREEFROG
GREEN TREEFROG
PIG FROG
STRIPED CHORUS FROG
EASTERN NARROWMOUTH TOAD
BULLFROG
GREEN FROG
SOUTHERN LEOPARD FROG
SQUIRREL TREEFROG
GRAY TREEFROG

****REPTILES****

GREEN SEA TURTLE
KEMP'S RIDLEY SEA TURTLE
SNAPPING TURTLE
ALLIGATOR SNAPPING TURTLE
PAINTED TURTLE
CHICKEN TURTLE
MISSISSIPPI MAP TURTLE
RIVER COOTER
COOTER
EASTERN BOX TURTLE
EASTERN MUD TURTLE
RAZORBACK MUSK TURTLE
COMMON MUSK TURTLE OR STINKPOT
SPINY SOFTSHELL
AMERICAN ALLIGATOR
EASTERN GLASS LIZARD

MEDITERRANEAN GECKO

****REPTILES CONT'****

GREEN ANOLE
FIVE-LINED SKINK
BROADHEAD SKINK
GROUND SKINK
RACER
RINGNECK SNAKE
RAT SNAKE
MUD SNAKE
EASTERN HOGNOSE SNAKE
COMMON KINGSNAKE
MILK SNAKE
GREEN WATER SNAKE
PLAINBELLY WATER SNAKE
SOUTHERN WATER SNAKE
DIAMONDBACK WATER SNAKE
ROUGH GREEN SNAKE
GLOSSY CRAYFISH SNAKE
NORTHERN BROWN SNAKE
WESTERN RIBBON SNAKE
COMMON GARTER SNAKE
COPPERHEAD
COTTONMOUTH
CANEBRAKE RATTLESNAKE
PIGMY RATTLESNAKE

****BIRDS****

COMMON LOON
PIED-BILLED GREBE
HORNED GREBE
EARED GREBE
WESTERN GREBE
AUDUBON'S SHEARWATER
MASKED BOOBY
AMERICAN WHITE PELICAN
BROWN PELICAN
DOUBLE-CRESTED CORMORANT
ANHINGA
AMERICAN BITTERN
LEAST BITTERN
GREAT BLUE HERON
GREAT EGRET
SNOWY EGRET
LITTLE BLUE HERON
TRICOLORED HERON

REDDISH EGRET
CATTLE EGRET
GREEN-BACKED HERON
BLACK-CROWNED NIGHT-HERON
YELLOW-CROWNED NIGHT-HERON
WHITE IBIS
GLOSSY IBIS
WHITE-FACED IBIS
WOOD STORK
TUNDRA SWAN
GREATER WHITE-FRONTED GOOSE
SNOW GOOSE
CANADA GOOSE
WOOD DUCK
GREEN-WINGED TEAL
AMERICAN BLACK DUCK
MOTTLED DUCK
MALLARD
NORTHERN PINTAIL
BLUE-WINGED TEAL
CINNAMON TEAL
NORTHERN SHOVELER
GADWALL
AMERICAN WIGEON
CANVASBACK
REDHEAD
GREATER SCAUP
LESSER SCAUP
OLDSQUAW
BLACK SCOTER
SURF SCOTER
WHITE-WINGED SCOTER
COMMON GOLDENEYE
BUFFLEHEAD
HOODED MERGANSER
COMMON MERGANSER
RED-BREASTED MERGANSER
RUDDY DUCK
BLACK VULTURE
TURKEY VULTURE
OSPREY
AMERICAN SWALLOW-TAILED KITE
MISSISSIPPI KITE
BALD EAGLE
NORTHERN HARRIER
SHARP-SHINNED HAWK
COOPER'S HAWK
RED-SHOULDERED HAWK
BROAD-WINGED HAWK

RED-TAILED HAWK

****BIRDS CONT'****

ROUGH-LEGGED HAWK

GOLDEN EAGLE

AMERICAN KESTREL

MERLIN

PEREGRINE FALCON

NORTHERN BOBWHITE

YELLOW RAIL

BLACK RAIL

CLAPPER RAIL

KING RAIL

VIRGINIA RAIL

SORA

PURPLE GALLINULE

COMMON MOORHEN

AMERICAN COOT

BLACK-BELLIED PLOVER

LESSER GOLDEN-PLOVER

SEMIPALMATED PLOVER

PIPING PLOVER

KILLDEER

BLACK-NECKED STILT

AMERICAN AVOCET

GREATER YELLOWLEGS

LESSER YELLOWLEGS

SOLITARY SANDPIPER

WILLET

SPOTTED SANDPIPER

SANDERLING

WESTERN SANDPIPER

LEAST SANDPIPER

BAIRD'S SANDPIPER

PECTORAL SANDPIPER

DUNLIN

SHORT-BILLED DOWITCHER

LONG-BILLED DOWITCHER

COMMON SNIPE

AMERICAN WOODCOCK

LAUGHING GULL

FRANKLIN'S GULL

BONAPARTE'S GULL

RING-BILLED GULL

HERRING GULL

GULL-BILLED TERN

CASPIAN TERN

ROYAL TERN

SANDWICH TERN

FORSTER'S TERN

COMMON TERN

LEAST TERN

BLACK SKIMMER

ROCK DOVE

WHITE-WINGED DOVE

MOURNING DOVE

COMMON GROUND-DOVE

YELLOW-BILLED CUCKOO

GROOVE-BILLED ANI

COMMON BARN-OWL

EASTERN SCREECH-OWL

GREAT HORNED OWL

BURROWING OWL

BARRED OWL

LESSER NIGHTHAWK

COMMON NIGHTHAWK

CHUCK-WILL'S-WIDOW

WHIP-POOR-WILL

CHIMNEY SWIFT

BUFF-BELLIED HUMMINGBIRD

RUBY-THROATED HUMMINGBIRD

BLACK-CHINNED HUMMINGBIRD

RUFIOUS HUMMINGBIRD

BELTED KINGFISHER

RED-HEADED WOODPECKER

RED-BELLIED WOODPECKER

YELLOW-BELLIED SAPSUCKER

DOWNY WOODPECKER

HAIRY WOODPECKER

NORTHERN FLICKER

PILEATED WOODPECKER

EASTERN WOOD-PEWEE

WILLOW FLYCATCHER

LEAST FLYCATCHER

EASTERN PHOEBE

VERMILION FLYCATCHER

ASH-THROATED FLYCATCHER

GREAT CRESTED FLYCATCHER

WESTERN KINGBIRD

EASTERN KINGBIRD

SCISSOR-TAILED FLYCATCHER

HORNED LARK

PURPLE MARTIN

TREE SWALLOW

NORTHERN ROUGH-WINGED SWALLOW

BARN SWALLOW

BLUE JAY

AMERICAN CROW

FISH CROW

****BIRDS CONT'****

CAROLINA CHICKADEE
TUFTED TITMOUSE
RED-BREASTED NUTHATCH
BROWN CREEPER
CAROLINA WREN
BEWICK'S WREN
HOUSE WREN
WINTER WREN
SEDGE WREN
MARSH WREN
GOLDEN-CROWNED KINGLET
RUBY-CROWNED KINGLET
BLUE-GRAY GNATCATCHER
EASTERN BLUEBIRD
GRAY-CHEEKED THRUSH
SWAINSON'S THRUSH
HERMIT THRUSH
WOOD THRUSH
AMERICAN ROBIN
GRAY CATBIRD
NORTHERN MOCKINGBIRD
BROWN THRASHER
WATER PIPIT
SPRAGUE'S PIPIT
CEDAR WAXWING
LOGGERHEAD SHRIKE
EUROPEAN STARLING
WHITE-EYED VIREO
SOLITARY VIREO
YELLOW-THROATED VIREO
PHILADELPHIA VIREO
RED-EYED VIREO
BLUE-WINGED WARBLER
GOLDEN-WINGED WARBLER
TENNESSEE WARBLER
ORANGE-CROWNED WARBLER
NORTHERN PARULA
YELLOW WARBLER
CHESTNUT-SIDED WARBLER
MAGNOLIA WARBLER
YELLOW-RUMPED WARBLER
BLACK-THROATED GRAY WARBLER
BLACK-THROATED GREEN WARBLER
YELLOW-THROATED WARBLER
PINE WARBLER
PALM WARBLER

BAY-BREASTED WARBLER
BLACK-AND-WHITE WARBLER
AMERICAN REDSTART
PROTHONOTARY WARBLER
OVENBIRD
NORTHERN WATERTHRUSH
LOUISIANA WATERTHRUSH
KENTUCKY WARBLER
COMMON YELLOWTHROAT
HOODED WARBLER
WILSON'S WARBLER
CANADA WARBLER
YELLOW-BREASTED CHAT
SUMMER TANAGER
SCARLET TANAGER
WESTERN TANAGER
NORTHERN CARDINAL
ROSE-BREASTED GROSBEAK
BLACK-HEADED GROSBEAK
BLUE GROSBEAK
INDIGO BUNTING
PAINTED BUNTING
DICKCISSEL
RUFIOUS-SIDED TOWHEE
BACHMAN'S SPARROW
AMERICAN TREE SPARROW
CHIPPING SPARROW
CLAY-COLORED SPARROW
FIELD SPARROW
VESPER SPARROW
SAVANNAH SPARROW
GRASSHOPPER SPARROW
HENSLOW'S SPARROW
LE CONTE'S SPARROW
SHARP-TAILED SPARROW
SEASIDE SPARROW
FOX SPARROW
SONG SPARROW
LINCOLN'S SPARROW
SWAMP SPARROW
WHITE-CROWNED SPARROW
WHITE-THROATED SPARROW
HARRIS' SPARROW
DARK-EYED JUNCO
RED-WINGED BLACKBIRD
EASTERN MEADOWLARK
WESTERN MEADOWLARK
RUSTY BLACKBIRD
BREWER'S BLACKBIRD

BOAT-TAILED GRACKLE

****BIRDS CONT'****

COMMON GRACKLE

BROWN-HEADED COWBIRD

ORCHARD ORIOLE

NORTHERN ORIOLE

PURPLE FINCH

PINE SISKIN

AMERICAN GOLDFINCH

HOUSE SPARROW

****MAMMALS****

SOUTHEASTERN MYOTIS

EASTERN PIPISTRELLE

BIG BROWN BAT

RED BAT

SEMINOLE BAT

NORTHERN YELLOW BAT

EVENING BAT

RAFINESQUE'S BIG-EARED BAT

BRAZILIAN FREE TAIL BAT

NINE-BANDED ARMADILLO

EASTERN COTTONTAIL

SWAMP RABBIT

GRAY SQUIRREL

FOX SQUIRREL

MARSH RICE RAT

FULVOUS HARVEST MOUSE

WHITE-FOOTED MOUSE

COTTON MOUSE

HISPID COTTON RAT

EASTERN WOODRAT

MUSKRAT

NUTRIA

RACCOON

MINK

RIVER OTTER

WHITE-TAILED DEER